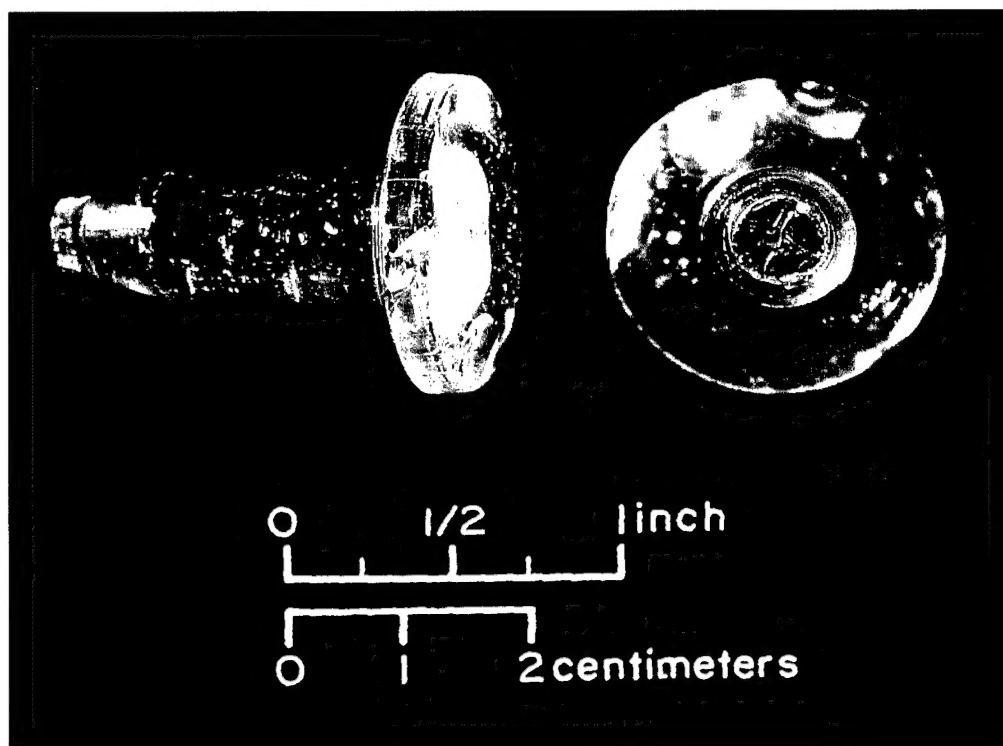


Phase I Historical Resources Survey:
Proposed Expansion of the Fort Barrancas
National Cemetery, Naval Air Station Pensacola,
Escambia County, Florida

Contract No. DACA01-97-D-0002
Delivery Order No. 071



Brockington and Associates, Inc.
Atlanta Charleston Raleigh
2002

REPORT DOCUMENTATION PAGE			Form Approved
Public Reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.			
1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE April 2002	3. REPORT TYPE AND DATES COVERED Final	
4. TITLE AND SUBTITLE Phase I Historical Resources Survey: Proposed Expansion of the Fort Barrancas National Cemetery, Naval Air Station Pensacola, Escambia County, Florida		5. FUNDING NUMBERS DACA01-97-D-0002 Delivery Order No. 071	
6. AUTHORS(S) Ramie A. Gougeon and Thomas G. Whitley			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) US Army Corps of Engineers, Mobile District PO Box 2288 Mobile, Alabama 36628-0001		8. PERFORMING ORGANIZATION REPORT NUMBER COESAM/PDEI-02-001	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) US Army Corps of Engineers, Mobile District PO Box 2288 Mobile, Alabama 36628-0001		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Unrestricted		12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 Words) From 20 to 31 August 2001, Brockington and Associates, Inc., performed an intensive historical resources survey (Phase I) within the proposed expansion site for the Fort Barrancas National Cemetery, at the Naval Air Station Pensacola (NASP), Escambia County, Florida. The project area includes an estimated 50 acres near the existing Fort Barrancas National Cemetery. We recorded and evaluated one archaeological site (8ES1435) and seven isolated finds during our field investigations. Site 8ES1435 is a historic/modern refuse dump. The site was previously identified in the 1988 Archaeological Sensitivity Map Survey conducted by the University of West Florida (UWF). However, the site was mis-plotted on maps generated from that survey. According to the site form, 8ES1435 is the remains of the "Old Hospital" and a historic/modern trash dump. The site has been heavily impacted by earth-moving activities and does not likely contain intact deposits. It is questionable as to whether the deposits are even associated with a medical facility. Further, some looting of deposits has occurred. Site 8ES1435 is not recommended eligible for the National Register of Historic Places (NRHP) and no further archaeological investigations should be required at this location.			
14. SUBJECT TERMS Fort Barrancas National Cemetery Naval Air Station Pensacola Historic Archaeology Florida Archaeology		15. NUMBER OF PAGES 40	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL

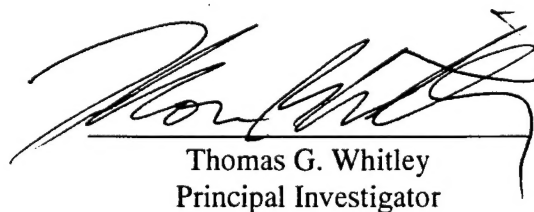
**Phase I Historical Resources Survey:
Proposed Expansion of the Fort Barrancas
National Cemetery, Naval Air Station Pensacola,
Escambia County, Florida**

Contract No. DACA01-97-D-0002
Delivery Order No. 071

Prepared for
US Army Corps of Engineers, Mobile District

Prepared By
Ramie A. Gougeon
Project Manager

and



Thomas G. Whitley
Principal Investigator

Brockington and Associates, Inc.
Atlanta Charleston Raleigh
April 2002

Management Summary

Under contract with the US Army Corps of Engineers, Mobile District, Brockington and Associates, Inc., performed Phase I historical resources survey within the proposed expansion site for the Fort Barrancas National Cemetery, Naval Air Station Pensacola, Florida. Background research, fieldwork (archaeological resources survey and site evaluation), laboratory analysis, and report production were completed in compliance with Section 106 of the National Historic Preservation Act of 1966 and with regulations implementing this legislation (36 CFR Part 800: *Protection of Historic Properties*). Our field investigations were conducted between 20 and 31 August 2001.

Background research focused on documenting previously recorded significant or potentially significant cultural resources (i.e., archaeological resources considered potentially eligible, eligible, or listed on the National Register of Historic Places [NRHP]). Field investigation focused on identifying and evaluating all archaeological resources within the 50-acre project tract.

We recorded and evaluated one archaeological site (8ES1435) and seven isolated finds during our field investigations. Site 8ES1435 is a historic/modern refuse dump. The site was previously identified in the 1988 Archaeological Sensitivity Map Survey conducted by the University of West Florida (UWF). However, the site was mis-plotted on maps generated from that survey. According to the site form, 8ES1435 is the remains of the "Old Hospital" and a historic/modern trash dump. The site has been heavily impacted by earth-moving activities and does not likely contain intact deposits. It is questionable as to whether the deposits are even associated with a medical facility. Further, some looting of deposits has occurred. Site 8ES1435 is not recommended eligible for the National Register of Historic Places (NRHP) and no further archaeological investigations should be required at this location.

Acknowledgments

The author wishes to acknowledge the agencies and individuals involved with the successful completion of archaeological fieldwork and the production of this report. NASP personnel Dan Bowen and Gary Sweppenhiser provided maps and information about the project area. Corps of Engineers archaeologist Dottie Gibbens also offered support. Brockington and Associates archaeologist Whitney Olvey is thanked for providing background information, reports, photos, and the lowdown on Pensacola.

The field director was Ramie Gougeon, ably assisted by bee-stung field technicians James Page, David Pittman, and Bryan Will. Artifact analysis was handled by Lori Kishlar, under the direction of Connie Huddleston. Report graphics were prepared by David Diener. Report production was directed by Sharon Egan. Many thanks are extended to the anonymous field crew that cut lines for a topographic survey of the project area. In most instances our transects followed theirs, and their careful marking of yellow jacket nests saved our crew additional grief.

Table of Contents

	<u>Page</u>
Management Summary	iii
Acknowledgments	v
List of Figures	viii
List of Tables	viii
Chapter 1. Introduction	1
Chapter 2. Methods of Investigation	5
Background Research	5
Archaeological Field Survey	5
Laboratory Analysis and Curation	6
Evaluation of National Register of Historic Places Eligibility	7
Chapter 3. Environmental Context	11
Climate	11
Topography	11
Soils	12
Vegetation	13
Chapter 4. Cultural Context	15
Cultural Background	15
Previous Archaeological Research	23
Chapter 5. Results and Recommendations	25
Background Research Results	25
Archaeological Field Survey Results	26
Isolated Finds	32
Conclusions and Recommendations	33
References	34
Appendix A Artifact Catalog	
Appendix B Florida Site Form	
Appendix C Comments of Florida State Historic Preservation Officer	

List of Figures

		<u>Page</u>
Figure 1.	Project area location (1970 <i>Fort Barrancas, Florida</i> 7.5 minute topographic quadrangle)	2
Figure 2.	Clear zone west of project area, facing east. Tree line marks western boundary of project area..	3
Figure 3.	Soil profiles from project area	13
Figure 4.	Site 8ES1435 and Isolate Finds within project area	27
Figure 5.	Plan map of site 8ES1435	29
Figure 6.	Site 8ES1435, north profile, Prov. 5.1	30
Figure 7.	Glass syringe, Prov. 4.1	31
Figure 8.	Bottle stopper, Prov. 4.1	31

List of Tables

		<u>Page</u>
Table 1.	General References for Artifact Analysis	7

Chapter 1. Introduction

From 20 to 31 August 2001, Brockington and Associates, Inc., performed an intensive historical resources survey (Phase I) within the proposed expansion site for the Fort Barrancas National Cemetery, at the Naval Air Station Pensacola (NASP), Escambia County, Florida. We conducted these investigations for the US Army Corps of Engineers, Mobile District. Survey of the project's area of potential effect (APE) has been completed in compliance with Section 106 of the National Historic Preservation Act of 1966 and with regulations implementing this legislation (36 CFR Part 800: *Protection of Historic Properties*), as specified in the project Scope of Work.

The project area includes an estimated 50 acres near the existing Fort Barrancas National Cemetery (Figure 1). The project area extends from Taylor Road north to Bayou Grande, and is adjacent to the golf course to the east. To the west of the project area is a large field marking the clear zone of an active air field (Figure 2). Generally, the project will include timbering pines, removal of hardwoods less than 6 inches in diameter, and extensive landscaping. Ultimately the area will be used as a cemetery. Deep burial shafts will be excavated for internments, and additional landscaping may occur. Other ground-disturbing activities include road and walkway construction, irrigation systems, and/or construction of buildings, mausoleums, or monuments.

The project area has experienced considerable disturbances from timbering and development activities. The most damaging of these includes past waste disposal activities in the forms of formal dump and more informal trash disposal episodes. Old logging roads and a deep aqueduct or drainage ditch cross the project area. Past military activities may have taken place on the project area as evidenced by large saucer-shaped pits or depressions. A landfill reportedly used in the 1960s crosses into the southeastern corner of the project area. Buried refuse in this area will be encountered by any ground-disturbing activities, particularly the excavation of burial shafts. Several groundwater monitoring stations are also located along Taylor Road.

This report documents the findings of the Phase I survey. Chapter 2 describes the methods used in background research, archaeological field survey, and artifact analysis. Chapter 3 describes the current environment and Chapter 4 summarizes the cultural context of the project area. Chapter 5 provides the results of the background research and archaeological survey, and presents management recommendations. Appendix A is the artifact catalog from archaeological survey. Appendix B contains the site form for 8ES1435.

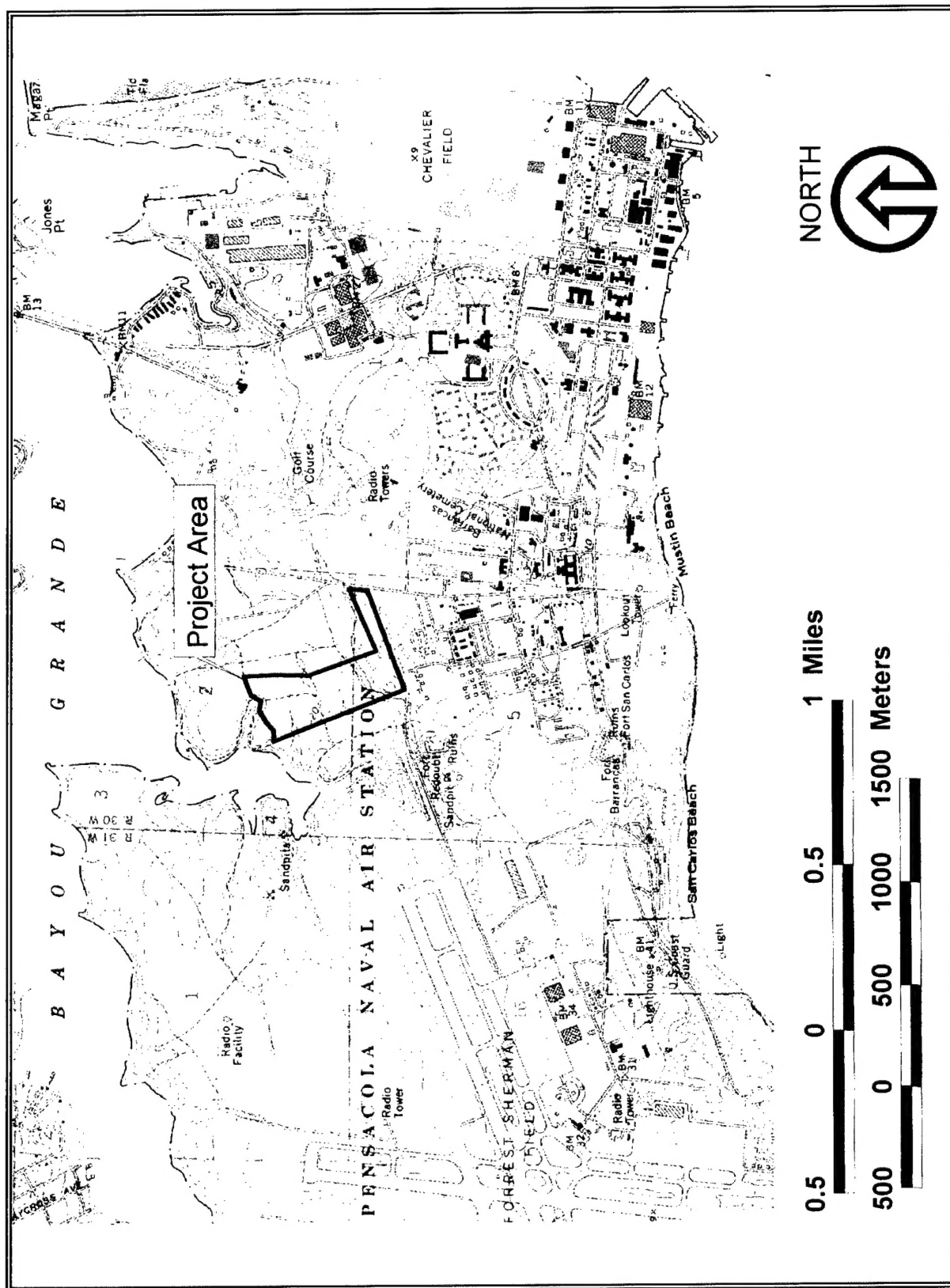


Figure 1. Project area location (1970 Fort Barrancas, Florida 7.5' USGS quadrangle).



Figure 2. Clear zone west of project area, facing east. Tree line marks western boundary of project area.

Chapter 2. Methods of Investigation

Background Research

Background research was conducted to identify previously recorded cultural resources within and near the project area and to recover information relevant to the project area's historic context. Research was conducted at the State of Florida Master Site Files to determine if previously recorded archaeological sites exist within the project area. Naval Air Station Pensacola Cultural Resource Manager Dan Bowen provided us with geographic information system (GIS) data about cultural resources within and near the project area. The list of National Register of Historic Places (NRHP) properties was examined to determine if previously listed, nominated, or eligible NRHP archaeological properties are located within or near the project area.

Archaeological Field Survey

Archaeological survey consisted of comprehensive and systematic coverage of the project area. The proposed cemetery includes an estimated 50 acres near the existing Fort Barrancas National Cemetery (see Figure 1). The project area extends from Taylor Road north to Bayou Grande. For the majority of the project, transects were oriented to 339°, corresponding to the angle of the western boundary relative to magnetic north. Transects were spaced 15 meters (49 ft) apart across the southern half of the project area. This spacing was increased to 30 meters (98 ft) in the northern half due primarily to time constraints, but based also on the generally poor condition of the project area. Intensive pedestrian survey was employed to identify possible archaeological resources within the proposed area.

Shovel tests were aligned along transects spaced at 15-meter (49 ft) and 30-meter (98 ft) intervals within the project area. This interval falls within a range that has been determined appropriate for effectively locating a variety of archaeological sites in local topographic and vegetational settings throughout the eastern United States (Kintigh 1988; Lynch 1980; Nance 1979; Nance and Ball 1986). Additional shovel tests were placed in high probability areas (for example, ridge tops) and in areas where previous surveys had located sites. Shovel tests were not excavated in areas of steep slope, in standing water, or in highly disturbed areas (for example, graded areas). In areas where ground surface visibility was greater than 50 percent (e.g., eroded slopes, cultivated fields, dirt roads), shovel tests were augmented by surface inspection.

Shovel tests were approximately 50 cm by 50 cm (19.7 in) square and were excavated to a depth of 1 meter (3.2 ft). Soil was screened through 1/4 inch hardware cloth. Records of each shovel test were kept in field notebooks, including information on content (i.e., presence or absence of artifacts, artifact descriptions) and context (i.e., soil color and texture descriptions, depth of definable levels, observed features). Distinct location information describing transect, shovel test, and surface

collection numbers was recorded on each acid-free resealable artifact collection bag. Positive shovel tests were flagged and labeled for easy relocation. All shovel tests were backfilled on completion.

Site boundaries were established by excavating additional shovel tests at 15-meter (49 ft) intervals outward in cardinal directions from any positive shovel test. Two consecutive negative shovel tests constituted a site boundary for this survey.

Archaeologists and cultural resource managers utilize a variety of definitions for sites and isolated finds. For the purposes of this project, a *site* was defined as an area containing five or more artifacts of a possible single occupation in a 30-meter (98 ft) or less diameter of surface exposure; or where at least two shovel tests within 30 meters (98 ft) were positive (contained one or more artifacts); or where surface or subsurface cultural features are present. If an area does not contain features or ruins, artifacts recovered must have some utility of meaning associated with their location (i.e., the area containing artifacts is of interest to a research, educational, or other purpose). A relatively small number of obviously redeposited artifacts (even if greater than four in number) would typically not be defined as a site without a compelling research or other reason. Similarly, artifacts of recent age (less than 50 years) would typically not define a site without a compelling research or management reason.

Locations with four or fewer artifacts and not containing features or ruins are classified as *isolated finds* or *isolates*. An isolated find may also be represented by more than four artifacts if the location has no utility of meaning for research or other purposes. Isolated finds are generally assumed to be not eligible for the National Register of Historic Places.

Laboratory Analysis and Curation

All recovered artifacts were transported to the Atlanta laboratory facilities of Brockington and Associates, Inc., where they were washed, cataloged, and sorted by excavation provenience. Distinct provenience numbers were assigned to each positive shovel test. Artifacts from each provenience were subsequently divided by class/type, and assigned a catalog number. Technicians bagged all artifacts by catalog number in labeled polyethylene self-sealing bags within each provenience. They enclosed archivally stable paper tags that duplicate the bag and catalog information in each individual bag. All provenience and catalog information was compiled into a coded database (Microsoft Access 2000). Technicians labeled all diagnostic artifacts using Acryloid B72 (either clear or white) and permanent black ink and diagnostic artifacts were pulled temporarily for photographs.

Artifact analysis is based on observable stylistic and technological attributes. Particular to this project, technicians used a number of reputable sources to identify type and provide descriptions of historic artifacts. Table 1 lists basic sources for this analysis.

The laboratory takes special precautions for any fragile artifacts. These items are carefully packaged using high quality archival materials to ensure their conservation. Bone items, especially bone tools are usually dry brushed clean and then coated with a 10 to 15 percent solution of Acryloid B72 for preservation. This same care may be taken with fragile ceramic artifacts. These procedures ensure conservation of the artifact and allow for a more accurate analysis of the artifact or manufacturing technique.

Table 1. General References for Artifact Analysis.

Historic Artifacts	Albert 1976 Fike 1987 Jones and Sullivan 1985 Lehner 1988 McKee and Mason n.d. Toulouse 1971
--------------------	---

Artifacts, project maps, field notes, and photographs have been prepared for storage at a federally approved repository for curation based on standards outlined in 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections; Final Rule). Following completion of the final report of investigations, these materials will be transferred to the Alabama Museum of Natural History, Division of Archaeology (13075 Moundville Archaeological Park, Moundville, Alabama 35474) for final curation.

Evaluation of National Register of Historic Places Eligibility

A primary goal of this project was to provide sufficient data to the USCOE and NASP for determining whether cultural resources identified during these investigations are significant. Cultural resources (i.e., districts, buildings, structures, sites, and objects) recorded within the project area during these investigations were evaluated based on the criteria for eligibility to the National Register of Historic Places (NRHP), as specified in Department of Interior Regulations (36 CFR Part 60: *National Register of Historic Places*). According to 36 CFR Part 60.4 (Criteria for evaluation), cultural resources (referred to as properties in the regulations) can be defined as significant (i.e., eligible for the NRHP) if they "possess integrity of location, design, setting, materials, workmanship, feeling, and association," and if they:

- (a) Are associated with events that have made a significant contribution to the broad pattern of history; or
- (b) Are associated with the lives of persons significant in the past; or
- (c) Embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Have yielded, or may be likely to yield, information important in prehistory or history.

Technical information and guidelines for evaluating NRHP eligibility are provided by the National Park Service in several published bulletins (e.g., Potter and Boland 1992; Savage and Pope 1998; Sherfy and Luce n.d.; Townsend et al. 1993). The process for evaluating properties for eligibility for the NRHP includes: categorizing the property as a district, a site, a building, a structure, or an object; determining the appropriate context (prehistoric or historic) for the property; determining whether the property is significant under the NRHP Criteria for Evaluation; and determining whether the property retains integrity (Savage and Pope 1998:3).

After a property has been assigned to a category (district, site, building, structure, or object), the historic context represented by the property has to be identified. According to the National Park Service, "the significance of a historic property can be judged and explained only when it is evaluated within its historic context" (Savage and Pope 1998:7). Evaluating a property within its historical context involves several steps. These include: identifying the themes, geographical limits, and chronological period that the property represents; determining how these themes are significant in the history of the area, state, or nation; determining whether the particular property type is important in illustrating these themes through historic associations, architectural or engineering values, or information potential; and determining the features that the property must have in order to reflect these themes (Savage and Pope 1998:7-8).

Archaeological properties (or sites) are usually evaluated relative to Criterion d. As locations of human activities which include physical remains of those activities, archaeological sites are potential sources of important information. However, some archaeological sites, particularly those representing historic period occupation or use, can be considered eligible under Criterion a (if they are associated with specific important events or trends in American history), under Criterion b (if they are associated with important people), or under Criterion c (if important structural elements are preserved) (Savage and Pope 1998; Townsend et al. 1993).

As indicated in 36 CFR Part 60.4(d), archaeological sites "that have yielded, or are likely to yield, information important in prehistory or history" can be eligible for the NRHP. The National Park Service defines two requirements for archaeological sites to be eligible under NRHP Criterion d (Savage and Pope 1998:21).

- (1) The site must have, or have had, information to contribute to our understanding of human history or prehistory, and
- (2) The information must be considered important.

The National Park Service provides clarification for the first requirement by stating that an archaeological site is eligible for the NRHP if that site "has been used as a source of data *and* contains more, as yet unretrieved data" (Savage and Pope 1998:21; emphasis added).

Regarding the second requirement, Glassow (1977) recommends careful consideration of specific site attributes (integrity, clarity, artifact frequency, and artifact diversity) in determining whether an archaeological site contains important information. Butler (1987:821) defines "important information" as the potential of an archaeological site to contribute to current "theoretical and substantive knowledge" of archaeology in the site's regional setting. In other words, under Criterion d, importance or significance can be defined as research potential. The research potential of an archaeological site (lacking architectural remains) can be determined by demonstrating that the site retains relatively intact archaeological contexts, such as culturally or temporally diagnostic artifacts, intact features, discrete artifact clusters denoting activity areas, or preserved organic material associated with the site occupation. To be considered eligible, these data should be capable of addressing important research questions by testing hypotheses, supporting current scientific interpretations, or reconstructing cultural chronologies through the use of appropriate analytical methods.

As indicated by Glassow (1977) aspects of integrity are also important to determining NRHP eligibility of archaeological sites. However, because "archaeological sites, in particular, do not exist today exactly as they were formed" (Savage and Pope 1998:46) and information potential relies less on overall condition of the site, *location* and *association* are the most important aspects of integrity for archaeological sites.

To be eligible for the NRHP, an archaeological site must possess artifacts in or near their original depositional *location* that can be employed to determine the past use of the locale and the approximate date of its past use. Integrity of location indicates occurrence of artifacts, artifact clusters, middens, or features in sufficient numbers to permit quantitative assessments of their horizontal and vertical distributions across the site. These cultural deposits must occur within relatively intact soil deposits that represent specific human activities, suites of activities, or natural events that occurred on the site. The relationships between cultural and natural remains are critical to understanding how the site was created (i.e., the kinds of human activities that occurred at the site to produce the artifacts and features) and how the site has changed since its initial occupation. The presence of artifacts and features that can be employed to make these interpretations is essential to recommending a site eligible for the NRHP.

Integrity of *association* is interpreted somewhat differently when referring to archaeological sites. Townsend et al. (1993:21) state that "under Criterion D, integrity of association is measured in terms of the strength of the relationship between the site's data or information and the important research questions." From a general perspective, archaeological sites that have the ability to address topics such as *cultural chronology*, *artifact assemblage*, and *subsistence patterns* have potential to contribute significant information.

Cultural chronology refers to the ability of a site to contribute significant information about the sequence of human events in a region. This ability, when present at a prehistoric site, is usually based on the availability of direct (or chronometric) and/or relative dating materials. Direct dating

methods in the Southeast are limited by available relevant samples (dendrochronology, potassium-argon) and cost (archaeomagnetism, thermoluminescence). For a site to have significant cultural chronology research potential, it must minimally demonstrate: (1) preservation of organic remains from good contexts that would provide reliable radiocarbon dating samples; or (2) horizontal or vertical separation of cultural components with associated temporally or culturally diagnostic artifacts.

Artifact assemblage data are often used in reconstruction of cultural history, based on the classification of artifacts and artifact assemblages, or associations of artifacts that are thought to be contemporary (Fagan 1988). Artifact assemblages are comprised of all items (including features) at a site which "exhibit physical attributes that can be assumed to be the result of human activity" (Dunnell 1971). The patterning of these assemblages reflects behavior patterns or shared activities of a total community. It is this patterning of contemporary collections of artifacts and features that is used to interpret the lifeways of a site's occupants. The composition and distribution of artifact assemblages provides valuable information about site structure, activities, and function(s). Comparisons of assemblages from the same time period (synchronic) or from different time periods (diachronic) require that each assemblage is placed within a regional culture chronology. If assemblages are mixed, the resulting distortion does not allow for reliable identifications of individual assemblages nor meaningful interpretations of associated activity patterns.

Subsistence reconstruction relies on plant (botanical) and animal (faunal) remains from archaeological contexts to deduce dietary patterns. This topic includes determination of species use, relative dietary significance of individual species, and procurement strategies (Reitz 1990; Wagner 1995; Wing and Brown 1979). However, the usefulness and reliability of plant (paleoethnobotany) and animal (zooarchaeology) studies is limited by the contexts from which these remains are recovered. For example, faunal remains are typically very poorly preserved at archaeological sites in upland settings, unless found in direct association with shell. Botanical remains are more likely to survive in an intact and identifiable form if they have been exposed to fire and become carbonized. Finally, the primary limitation to paleoethnobotanical and zooarchaeological analyses is context. Preserved biological remains from contexts that are not associated with distinct cultural horizons or features, or cannot be directly or relatively dated, do not provide reliable information.

It is important to note that the ability of an archaeological site to generate information beyond that already known (i.e., its research potential) must be evaluated. If artifacts and features encountered at a newly discovered site occur at numerous previously recorded sites in a region, then the new site is not expected to generate new information. This site could be recommended ineligible for the NRHP even though it may contain adequate numbers of temporally and/or functionally sensitive artifacts within intact natural or cultural deposits. Alternatively, a site that produces extremely rare artifacts or evidence of extremely rare activities may be considered eligible even if it lacks these associations.

Chapter 3. Environmental Context

Naval Air Station Pensacola (NASP) lies in the Southern Coastal Plain geophysical province. The project area includes a stabilized beach terrace located between the A.C. Read Golf Course and a clear zone for runways to the west. The terrace is mostly level and sandy, with an area of planted pines and some secondary growth forest. The climate, topography, soils and vegetation are characteristic of the Southern Coastal Plain. Summary of environmental conditions and soil characteristics are based on Fernald and Purdham (1992).

Climate

The southern half of Escambia County averages greater than 152 cm (60 in) of precipitation annually. The average annual maximum daily temperature lies between 25°C and 26°C (77°F and 78°F). Average annual minimum daily temperature falls around 13°C (55°F). The number of days with temperatures exceeding 31°C (88°F) is 100 or less. The number of days with temperatures below 4°C (40°F) is 30 or less. Temperatures at NASP today may be slightly higher than in the past due to radiant heat from large expanses of concrete.

Summer and early fall humidity is high, usually between 80 and 100 percent in the afternoon. Winter and early spring humidity is much lower, often less than 20 to 40 percent during the warmest time of day. Frequency of rainfall is fairly consistent through most of the year but increases dramatically during the summer, with strong afternoon thundershowers common. Hurricanes contribute significantly to the accumulation of September rainfall.

Topography

Escambia County ranges in elevation from 0 to 76 m (0 to 250 ft) above mean sea level. It is bounded on the east by the Escambia River and on the west by the Perdido River. The county topography consists principally of low wetlands and flat uplands surrounding numerous small creek drainages. The low ridge between the Perdido and Escambia rivers forms the north-south spine of the county between the sea and the Alabama state line. This spine splits the two primary drainage basins in the county. All of the streams in the county empty into one of a series of bays or bayous on the Gulf Coast.

The project tracts lay between 1.5 and 7.6 m (5 and 25 ft) above mean sea level. The area lies on a flat beach terrace which has been built up and stabilized over the last 170 years. The terrace was built by the deposition of sand, sand dunes and small beach ridges at the base of the low bluff upon which Fort Barrancas is situated. The Fort Barrancas area represents a low coastal bluff, rising as much as 8 to 10 m (25 to 33 ft) above the beach. This portion of the Silver Bluff sequence represents a Late Holocene remnant shoreline, between 5,000 and 6,000 years in age.

Soils

Soils in the extreme southern portion of Escambia County consist predominantly of Spodosols with highly localized drainage characteristics. The stratigraphy generally includes light sandy moderately well drained topsoils overlaying dark somewhat poorly drained sandy subsoils. Other portions of the county include moderately to excessively well drained Entisols or Ultisols. The wetland soils tend to have a higher clay content, but the marine origins of the predominant parent materials tends to make sand the dominant grain size throughout. Parent materials include Quaternary marine sediments in the southern portions of the county, and Pliocene-aged Citronelle Formation sands and gravels in the north.

The project area soils are highly variable from one portion of the tract to the next. In large part this is due to ground disturbances in the forms of timbering and refuse disposal activities. A typical soil profile from the timbered area consists of 0 to 5 cm (0-1.97 in) of dark brown (Munsell Soil Color 10YR3/3) sandy loam followed by approximately 20 cm (7.88 in) of dark grayish brown (10YR4/2) sand over sterile yellow (10YR7/6) sand (Figure 3 - "yellow" profile). In areas with planted or secondary growth pines the typical soil profile consists of 0 to 10 cm (0-3.94 in) of dark brown (10YR3/3) sandy loam over 20 cm (7.88 in) of grayish brown (10YR5/2) sand over a 10 cm (3.94 in) rock-hard dark brown (10YR3/3) fragipan layer. Below the fragipan is 20 cm (7.88 in) of dark brown (10YR3/3) sand giving way to white (10YR8/1) sand by 1 meter (3.28 ft) below ground surface (Figure 3 - "gray" profile). The 1960 landfill is marked by 8 to 10 cm (3.15-3.94 in) of dark brown (10YR3/3) sandy loam followed by a 10 cm (3.94 in) dark red (2.5YR3/6) clay cap over a heterogeneous mixture of black, brown, and/or orange sands to depths of 1 meter (3.28 ft) below ground surface (Figure 3 - "landfill" profile). Modern debris is encountered from the surface to 1 meter (3.28 ft) below ground surface.

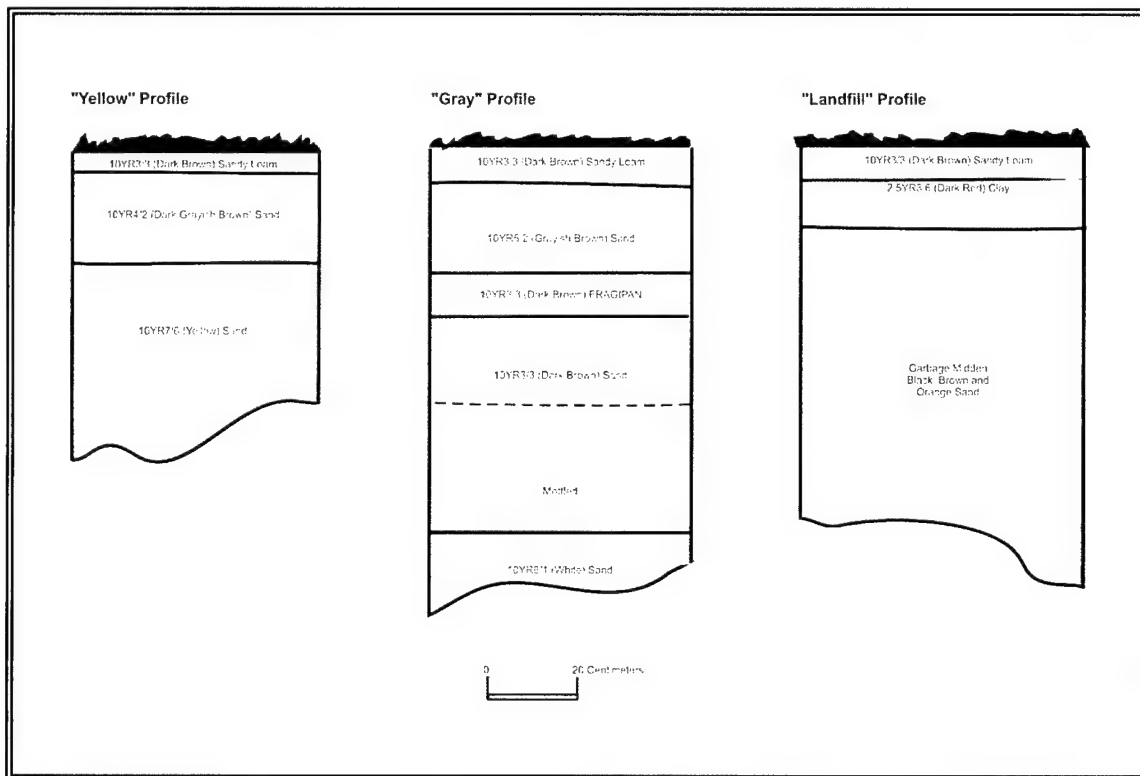


Figure 3. Soil profiles from project area.

Vegetation

Escambia County typically contains a large percentage of natural pine barrens and planted pine plantations. Oak-hickory woodlands tended to dominate in the past with coastal communities of live oak forest. Beach and dune vegetation include a wide variety of shrubs and sea oats. Grasslands are scattered throughout the county, particularly in the uplands. Undergrowth is dominated by saw palmetto.

As mentioned previously, the project area is covered in several types of vegetation. This includes scrub oak and pine secondary growth, with a thick understory of palmetto, and planted pine stands. Secondary growth outside of the 1960 landfill area is generally well established and open, while secondary growth within the landfill area is quite thick and nearly impenetrable in places.

Chapter 4. Cultural Context

Cultural Background

As it is presently understood, human occupation and its associated cultural environment spans at least 14,000 years in the Southeast. This span is divided into a number of temporal and cultural periods. Each period is characterized by its own settlement patterns, subsistence strategies, technology, and diagnostic artifacts. Remnants of these temporal periods are left in the form of archaeological deposits. A brief discussion of the cultural history of the region is presented below.

Paleoindian Period (9500 - 8500 BC)

The Paleoindian period in northwest Florida is characterized by isolated finds of lanceolate or fluted projectile points and occasionally an associated hearth or other features. Projectile points from this time period include Clovis, Simpson, Suwannee, and Dalton. Anderson (1996:32-39) suggests a two-staged diffusion of Paleoindian populations into the Southeast, with much of north Florida as a later Paleoindian concentration of Suwannee/Simpson culture. The region may have acted as a macroband territory prior to the development of the Early Archaic.

A settlement model first suggested by Neill (1964) but expanded on by Dunbar and Webb (Dunbar 1991; Webb et al. 1984) theorizes that Paleoindian settlement focused on "oases" or more properly the concentration of wildlife in and around streams, springs and karstic sinks. A significant amount of material, including associated Paleoindian points and Pleistocene faunal remains, suggests that the theory has a great deal of merit (Milanich 1994:37-45). Since the ancient Paleoindian shoreline lies some miles into the Atlantic and Gulf of Mexico, many Paleoindian sites are likely to be in locations no longer accessible by current survey techniques.

By the end of the Paleoindian period prehistoric populations were shifting from small highly mobile bands to larger aggregates of increasingly localized basecamps. Large heavy lanceolate projectile points were gradually replaced by generally smaller more finely crafted corner- or side-notched types (Bullen 1975). Bolen, Morrow Mountain, Eva, and Florida Archaic Stemmed point styles became common. This reflected not only a change in technological innovation but a shift in focus to smaller prey.

Archaic Period (8500 - 1000 BC)

Archaic period basecamps were selected primarily for repeated access to hunted and gathered resources. Prior to the development of horticulture these resources were prey species, wild plants, and lithics. Natural barriers to movement prevented colonization in some instances, but groups were

also aggregated according to complex territorial arrangements. Territories probably evolved early and shrunk considerably as populations increased or seasonal rounds developed based on smaller prey species (Anderson and Joseph 1988).

In Florida the pattern may have involved seasonal usage of upland and coastal zones, but focused in large part on the transition between coastal and riverine resources (Milanich 1994:67). Some significant archaeological materials have been recovered from the Windover site in northeast Florida, including evidence of complex textile manufacture as early as 8,000 years ago (Doran and Dickel 1988). The Windover site suggests a highly developed, diverse exploitation of riverine and marsh resources. The picture from northwest Florida suggests an equally diverse subsistence regime. Numerous shell middens on both the Atlantic and Gulf Coasts bear witness to increased exploitation of coastal resources as well.

The Early Archaic period is distinguished from the preceding Paleoindian period on the basis of the technological change from large fluted projectile points to simpler, smaller and more diverse points. The general density of populations increased, but the patterns of subsistence may have been largely unchanged. It is likely that the availability of springs and karstic sinks was much higher during the Early Archaic which led to more focused settlement.

The shift towards more diverse and complex Middle Archaic populations took place gradually. The Middle Archaic appears to show an increase in more permanent settlement, particularly in the large river valleys and along the coast. This is perhaps most indicative of increasing territorial subdivision by discrete tribal, or family units. During this period one begins to see the characteristics of seasonality and continual seasonal rounds within restricted territories. This is expanded in the Late Archaic.

The primary development in the Late Archaic which distinguishes it from the preceding periods is the invention of pottery. Around 4,000 years ago fiber-tempered ceramics (e.g. the Orange series) were developed in northeast Florida, indicating a push towards a more sedentary settlement strategy (Sassaman 1993). In northwest Florida the earliest pottery is the sand- and fiber-tempered Norwood Plain. The subsistence systems did not change substantially between periods, but it appears that settlement may have become increasingly sedentary. The development of fiber-tempered pottery may have been in response to the decrease in nomadic lifestyle, or the prolonged occupation of preferred sites.

It may be oversimplification to consider changes in faunal procurement strategies or territorial boundaries between and within the Paleoindian and Archaic periods as resulting from a single factor (such as climate change). Rather, a complex web of highly interdependent factors influenced the cultural evolution of hunter-gatherers in the Southeast. This implies that later developments were in many ways predestined by very early strategies. The study of Savannah River

chiefdoms by Anderson (1994) is a detailed example of the ways in which very complex political and economic forces interact in different ways. These later period manifestations clearly have their roots in earlier hunter-gatherer societies.

Woodland Period (1000 BC - 900 AD)

By the time that ceramics were developed, subsistence began to focus to a larger degree on domesticated resources, such as maize and squash, or initially much larger quantities of native domesticates. Non-native crops were probably introduced from Mexico and supplemented the locally derived domesticates before displacing them during the Mississippian (Yarnell 1993). Planting and maintaining plots of land, initially through slash and burn horticulture but eventually through more sophisticated crop management techniques, helped select for the development of more stable settled societies (Binford 1968; Bender 1978). Increased sedentism was probably a factor leading to higher rates of reproductive fertility, and subsequent population increases.

Evidence of differential access to exotic trade goods and the social demands of craft specialization are ways in which the archaeological record reveals the development of social diversity. A system evolved in the Southeast where more complex societies participated in regional interaction and developed centers of political influence (Marshall 1987; Barker and Pauketat 1992; Anderson 1994).

The culture historical periods in which these characteristics developed and reached their greatest degree of complexity are usually identified as the Woodland (1000 BC - 900 AD) and the Mississippian (900 - 1600 AD). Each of these can be divided into finer classifications based on particular pottery typologies and the presence/absence of public or symbolic architecture, usually identified as Early, Middle or Late subperiods.

The Early Woodland subperiod is correlated with increasing intra- and extra-regional trade (exemplified by more exotic items), developing social hierarchies, technological innovations in ceramics as well as hunting strategies (the bow and arrow), and a presumed increase in political superstructures. Dwellings become more permanent, are situated in denser concentrations and are extended as part of more continuous settlements. The trend increases throughout the Middle and Late Woodland subperiods with the addition of mound building and the extension of greater emphasis on sedentary agriculture.

In northwest Florida the Deptford complex of ceramic styles dominates the Early Woodland subperiod. Deptford Bold, Simple Stamped and Linear Check Stamped, are associated with the first major deviation between the Atlantic and Gulf Coast cultural developments. Gulf Deptford evolved after 100 BC probably reflecting an increased trade with Hopewellian cultures to the north. Trade

items of particular interest to interior people were large marine shells and possibly plant materials (Milanich 1994:134-135). Prehistoric northwest Floridians profited from acquiring copper, stone and ceramic items, and seem to have exceeded their neighbors to the east in the rapid development of ceremonialism.

By AD 100 the Deptford styles were replaced by the Swift Creek and Santa Rosa cultural styles. Santa Rosa Stamped, Basin-Bayou Incised, and Swift Creek Complicated Stamped represent typical Middle Woodland period ceramics from northwest Florida. Little settlement or subsistence change occurred between Deptford and Swift Creek/Santa Rosa, but the largely contemporaneous Swift Creek and Santa Rosa pottery styles are spatially delineated by an approximate line running north from Panama City (Milanich 1994:143). Swift Creek/Santa Rosa continued a settlement pattern focused on Live Oak-Magnolia hammocks adjacent to rich freshwater and tidal marshes. Swift Creek/Santa Rosa settlement seems to have increased the occupation of interior woodlands, however.

Between AD 200 and 900, the Middle Woodland pottery types were replaced by Late Woodland Weeden Island ceramics. Typical Weeden Island pottery styles from northwest Florida include: Weeden Island Punctated, Weeden Island Incised, Indian Pass Incised, and Wakulla Check Stamped. Weeden Island settlement is widely varying across diverse environmental habitats. An emphasis on coastal occupation occurs, but increasing numbers of sites are shell middens, as well as burial and ceremonial mounds (Milanich 1994; Milanich et al. 1984).

Mississippian Period (900 - 1540 AD)

In general, the Mississippian period is seen as a time of permanent settlements, increased religious and social complexity, and great dependence on intensive agricultural practices. The most dramatic characteristics of this period are observed in the construction of large fortified villages, and flat-topped earthen mounds utilized in political and religious functions. Hierarchically organized chiefdoms developed early in this period and evolved into enormous polities with great power and far-flung influence (DePratter 1991; Dragoo 1975:20-21; Griffin 1967:189-190; Hally 1994; Hudson 1997; Hudson et al. 1985; Knight 1990; Smith 1987; Smith 1990; Stoltman 1978:727). The period is generally considered to end with the expeditions of Spanish explorers, Hernando de Soto in particular, in 1540, though many Mississippian cultural traditions continued well into the historic period (Gougeon 1999; Hudson 1997; Pavao-Zuckerman 2000, 2001).

In northwest Florida, Fort Walton-Pensacola ceramic styles replace the Late Woodland/Mississippian transition Weeden Island styles. Pensacola Incised, Moundville Incised, and their variants tend to be the most commonly occurring types. Fort Walton-Pensacola sites were probably keyed to ceremonial centers, via a network of high traffic trade routes. Centrally placed centers would have been surrounded by satellite villages and outlying farming hamlets. Intensive field agriculture of maize and cucurbits seems to have replaced the slash and burn horticulture of the

Weeden Island period. Exotic trade items and highly decorative craft products indicate a widespread ceremonial complex and provide some small insight into ideology (Milanich 1994:356-387; Brose 1984:185-197).

With the arrival of the first Europeans, southeastern polities began to collapse (Peebles 1986; Anderson 1994). European contact brought dramatic alteration of Native American technology and lifeways. By the mid-1600s Florida was inhabited by smaller populations of historically known tribal confederations such as the Yamasee, Calusa, Timucua, and Apalachee. Mound building ended and extreme social stratification declined, at least in part due to populations displacement. The trade routes that linked all of the individual regions with each other and with areas outside the Southeast remained, but the regional political dominance of population centers declined. It is likely that disease introduced by the Spanish, and later the English, was responsible for the elimination of a very large percentage of the population (Wood 1989), and perhaps the role of regional polities, as it transformed the elaborate political structure of the region.

Historic Overview

First Spanish Period (AD 1528-1763)

Although Spanish pilots had explored and mapped the Gulf Coast since the early sixteenth century, the first Europeans to enter Pensacola Bay were likely the survivors of the ill-fated Narváez expedition in 1528. The next European excursion to Pensacola Bay was led by Francisco Maldonado, who was charged with resupplying Hernando de Soto's expedition throughout the Southeast. Maldonado waited for several months in 1540 and 1541 but De Soto never arrived. Although no known documents exist from his visit, Maldonado probably explored Pensacola Bay and other nearby waterways.

Under pressure to establish coastal settlements in the Southeast from which they could defend shipments en route from Mexico to Spain, the Spanish again entered the waters of Pensacola Bay in 1559, under the command of Tristán de Luna y Arellano. This large and well-planned colonizing force was doomed to failure when a hurricane struck shortly after its arrival. Nine of Luna's twelve ships were destroyed, along with most of the colony's supplies and foodstuffs. The Luna enterprise was terminated in 1561, four years before St. Augustine was founded by Menendez (Smith et al. 1998:3). For the next 134 years, the Spanish made no further attempts to colonize the Pensacola area.

At the end of the seventeenth century, encroachment into La Florida by the French and English finally convinced the Spanish to return to Pensacola Bay. In 1698 Spain sent Andres de Arriola to construct the Presidio Santa María de Galve, which overlooked Pensacola Pass, on the present-day Naval Air Station Pensacola. Built atop the Red Cliffs, or Barrancas, which lined the bay, this government-subsidized military installation was built to stem French encroachment from

the west. The Presidio complex included a fort built of pine stakes, logs, and sand, named San Carlos de Austria, and a nearby village and church; these facilities were eventually moved inside the fort due to ongoing attacks by hostile Indian groups (Coker and Childers 1998:11-98).

The Spanish remained at the Presidio until 1719, relying for their survival on irregular shipments of the *situado* (supplies and annual subsidies), illegal trade with the French in Mobile, and when possible, local gardening, hunting and fishing (Bense and Wilson 1999:11-12; Coker 1996:121). With the outbreak of the war of Quadruple Alliance in 1719, friendly relations between the Spanish at Pensacola and the French in Mobile quickly ceased. Taking the Spanish completely by surprise, the French overran the Spanish fort on 17 May 1719 (Coker 1996:123).

The Presidio Santa María de Galve remained in French hands until the end of the war in 1722, when it was returned by treaty to Spain. When the Spanish arrived to reclaim Pensacola, they found Fort San Carlos de Austria in complete ruins and decided to rebuild the Presidio across Pensacola Bay on Santa Rosa Island (Presidio Isla de Santa Rosa), where it remained until it was destroyed by a hurricane in 1752. Overcoming this disaster, the Spanish rebuilt once again at what is now the historic district of downtown Pensacola (Presidio San Miguel de Panzacola).

British Period (1763-1781)

The area surrounding the Presidio Santa María de Galve lay abandoned from 1722 to 1763, when the British acquired Florida in return for Cuba through the Treaty of Paris (Wilson 1997:2). The British divided Florida into two colonies and Pensacola became the capital of the West Florida colony. Unlike the Spanish, who settled the area purely for military reasons, the British came to Pensacola with the idea of remaking Pensacola in the image of other British colonial towns such as Williamsburg (Stringfield 1996:21). The town was surveyed and laid out in grid form around the old Spanish stockade fort (Fort San Miguel) and within a few years British merchants, farmers, craftsmen, laborers and their families could be seen on the sandy streets of Pensacola.

Though Pensacola was essentially spared from all major battles associated with the American Revolution, the war spurred a broad expansion of fortifications in Pensacola. Four military installations were built in Pensacola during the British period. One of those four was the Royal Navy Redoubt, built on the Barrancas overlooking Pensacola Pass, and used to guard Pensacola from sea attack. Built with pine logs, the redoubt stood where Fort Barrancas stands today, approximately 1,500 feet west of the old Spanish Presidio Santa María de Galve (Coleman and Coleman 1982:17). During the Spanish siege of Pensacola in 1781, the redoubt was not damaged and was renamed Fort San Carlos de Barrancas (Coleman and Coleman 1982:27). Historians have also noted the possibility of a small village on the Red Cliffs associated with the Royal Navy Redoubt, though it has not been identified archaeologically (Coker 1984:23).

Second Spanish Period (1781-1821)

The late 1700s found Spain and England again at war. Hoping to obliterate any potential British offenses, Louisiana Governor Bernardo de Galvez led a successful military campaign along the Mississippi and finally took Pensacola for Spain in 1781. After the peace settlements of 1783, the two Florida colonies were once again under official Spanish rule and Pensacola was named capital of West Florida in 1803 (Stringfield 1996:36). Inheriting a formal town plan from the British, government officials, military officers and citizens in second Spanish Pensacola followed the existing spatial layout of the town and reorganized the cultural landscape only as financial needs demanded (Mullins 1998: E.4).

Although largely concentrated near the mouth of Pensacola Bay, colonial settlers could also be found clustered to the west of Pensacola along the Barrancas, near the military fortifications. Despite the fact that plans to move the town of Pensacola to this location failed to be ratified by the Spanish King, Barrancas village, as this area was called, survived (Wilson 1997:3).

The military fortifications at Pensacola during the second Spanish period consisted of a wooden town wall and three strong houses (Pintado 1816). Periphery fortifications of the town included Fort San Bernardo (built by the British) on the north side of town, and a brick, water level battery called San Antonio below the bluff at Barrancas. To the north for defense of the battery, Fort San Carlos de Barrancas was established in the former British Royal Navy Redoubt. There was also a defensive battery on Santa Rosa Island and one on Point Siguenza (Mullins 1998:E.6). Although Battery San Antonio still stands today, San Carlos de Barrancas was destroyed with explosives in 1814 by enraged British troops preparing to defend New Orleans from the American Army led by General Andrew Jackson (Faye 1942:277-292).

After 1800, Spanish West Florida began experiencing economic and political difficulties that were tied to both European events and colonial positioning. As the Spanish Crown viewed Napoleon's rise to power and the French sale of Louisiana territory to the United States with apprehension, Spanish officials in West Florida worried over an increasing population of Anglo-American squatters in the colonies' interior. The deteriorating situation eventually convinced Spain that West and East Florida were a liability and power was transferred to the United States in 1821.

American Period (1821-present)

At the start of the American period, the Pensacola region grew slowly. Conditions improved in 1825 when the United States Congress decided that Pensacola would be the site of the Gulf Coast's new Navy Yard. The Yard was to be located at Tartar Point, just east of the Barrancas. In 1826, the first contracts were granted to area businessmen for the building of the 7th US Navy Yard under the command of Captain Lewis Warrington (Pensacola Archaeology Lab [PAL] 1998:115). By the time Florida was admitted to the Union in 1845, facilities at the Pensacola Navy Yard had

grown to include Commandant's Quarters (1828), a Naval Hospital (late 1830s) and a wall on the north and west boundaries of the Yard (1837). In 1853 the Pensacola Navy Yard was complete. When the *USS Seminole* and the *USS Pensacola* were launched in 1859, the Navy Yard at Pensacola was a first-class facility. The compound included two dry docks, a wet basin, local railroad lines and a large wharf (1853-1856) (US Army Corps of Engineers [USACE] 1995:4).

When Captain Melancthon Woolsey took command of the Yard in 1827, he began recruiting blacksmiths, coopers and other laborers from the Northern Yards and formalized the towns of Warrington and Woolsey for the Navy Yard workers to live in as a "respectable population" (Dibble 1974:13). Warrington and Woolsey were located directly outside of the Navy Yard walls, with Woolsey to the north and Warrington to the west. Occupants were to be granted a lease of property so long as they "kept orderly houses" and improved the lots (Dibble 1974:13; USACE 1992a:11).

Though initially reliant solely on the prosperity of the Navy Yard, residents of Warrington and Woolsey soon diversified to form solid communities and economic bases (USACE 1992a:15). Historians have noted that before evacuation on the eve of the Civil War, both Warrington and Woolsey were thriving communities with churches, shops, a post office, and places of entertainment (Pearce 1980:56).

A government study just prior to the outbreak of the Civil War indicated that the military defenses at Pensacola were not sufficient to defend the area from attacks (Historic Property Associates [HPA] 1986:15). This dire prediction was realized when Confederate troops overtook the Pensacola Navy Yard, Warrington and Woolsey in early 1861. In 1861 and 1862, Union soldiers bombarded Fort Barrancas, the Navy Yard and the villages of Warrington and Woolsey from Fort Pickens and from ships in the Gulf of Mexico. The Yard and most of Warrington and Woolsey were heavily damaged and never fully recovered (HPA 1986:15).

After the Civil War, the residents of Woolsey and Warrington eagerly returned to their homes and jobs on the military reservation only to have their fortunes rise and fall again and again through the remaining years of the nineteenth century and the first few decades of the twentieth century. Yellow fever epidemics, major hurricanes, fires and finally the march of progress eventually destroyed the two villages. Woolsey was finally razed in 1921 to make room for Chevalier Field, followed by the razing of Warrington in 1930 (USACE 1992a: xi).

During the years after 1930, the Navy added additional responsibilities and training facilities to the Naval Air Station Pensacola. Large numbers of pilots were trained at NASP prior to and after World War II, peaking in 1944. NASP today is the headquarters for the Chief of Naval Education and Training, as well as numerous other facilities.

Previous Archaeological Research

In 1979, while conducting research for the National Park Service, Florida State University archaeologist Chad O. Braley collected artifacts 1,500 feet east of Fort Barrancas (8ES17), dating to the early seventeenth century (Braley 1979:36). Seven years later, University of West Florida (UWF) archaeology student Thomas Garner recovered similar artifacts from the same area and recorded the site in the Florida Master Site File, where he listed the site as the probable location of Fort San Carlos de Austria. Later investigations by UWF archaeologist Judith A. Bense and USACE archaeologists confirmed the nature and significance of the site (USACE 1992b:57). Presidio Santa María de Galve (8ES1354) was the focus of a five-year investigation by UWF beginning in 1995 (Bense and Wilson 1999:1).

Several components of the British period in Pensacola have been documented both archaeologically and historically. These components include the Fort of Pensacola and associated buildings, a well, two civilian residences and the government house (Bense and Wilson 1999; Cusick 1986; Stringfield 1996). Within the boundary of Naval Air Station Pensacola, evidence of the British Royal Navy Redoubt of 1771 to 1781 and the post-1781 Spanish occupation (Fort San Carlos de Barrancas) were encountered during investigations by USACE, Mobile District, archaeologists in 1992 (USACE 1992b).

Numerous archaeological investigations in Pensacola have recorded Second Spanish period deposits. These sites include military, industrial and residential occupations and are extremely well preserved in some areas of Pensacola (Bense 1989). At Naval Air Station Pensacola, Barrancas village components were excavated during the UWF investigations at the Presidio Santa María de Galve (Swann 1998).

Previous archaeological investigations at Warrington (8ES1436) and the Pensacola Navy Yard include a USACE pipeline survey (USACE 1990), a USACE Phase II investigation on a tract of land within historic Warrington (USACE 1992a) and a Phase I investigation of a proposed parking lot within the Navy Yard walls. The Pensacola Archaeology Lab (PAL) monitored the excavation of a fuel pipeline across the Navy Yard from 1993 to 1994.

Archaeological investigations at Woolsey (8ES1444) began with a USACE fiber optic survey (USACE 1987) which revealed the original Woolsey ground surface. In 1988 UWF archaeologists recorded Woolsey with the Florida Master Site File (8ES1444). USACE archaeologists confirmed the original Woolsey ground surface in 1992 (USACE 1992a). Janus Research/Piper Archaeology conducted a cultural resource assessment for proposed facilities on Chevalier Field, resulting in Woolsey's determination of eligibility for listing on the National Register of Historic Places (Janus 1993). Additionally, PAL monitored construction over Woolsey village from 1994 to 1998. These investigations identified over 200 historic features and midden deposits associated with Woolsey village (Curren et al. 1998).

Additional archaeological investigations have occurred in recent years in several areas of the NASP. First, a data recovery was carried out in the vicinity of Pensacola's first lighthouse in 1999 at site 8ES64 (Jordan et al. 2000). Remains of the first lighthouse keeper's residence were excavated in the location of a proposed expansion to the Navy Lodge building. The report was developed into a symposium of collected research papers and presented at the 1999 Southeastern Archaeological Conference in Pensacola.

Second, in 1999 an archaeological survey was conducted in the Barrancas residential neighborhood and the North Avenue portion of the Navy Yard prior to the installation of geothermal heat pumps (Whitley and Mullins 1999). Though the survey was restricted to small tracts adjacent to existing buildings, the results established the Navy Yard as an archaeological locality (8ES2839) and added to the database of knowledge regarding the Presidio site (8ES1354).

Brockington and Associates conducted archaeological investigations in 2000 at the A.C. Read Golf Course, NASP (Mozingo and Whitley 2000). Approximately 300 acres were surveyed prior to proposed improvements to the golf course. Seven sites were investigated, including a Late Woodland Weeden Island I mound (8ES2969). Lastly, Brockington and Associates conducted a Phase I archaeological survey at the Oak Grove Campground, NASP, in April 2001 (Olvey and Harvey 2001). No new sites were recorded during this survey, but features that might be part of a previous squatter's residence (site 8ES1437) were located in the area.

Chapter 5. Results and Recommendations

Background Research Results

Background research was conducted to identify previously recorded archaeological resources within and near the project area and to recover information relevant to the project area's historic context. A Cultural Resources Data Management report is currently in production by Brockington and Associates archaeologists outlining the Archaeological Site Protection Plan (ASPP) for the 53 presently known sites on the NASP facility (Olvey et al. 2001). One source of information on previously recorded sites is the 1988 Archaeological Sensitivity Map Survey conducted by the University of West Florida (UWF), a copy of which is available at NASP. Several sites were identified within the immediate vicinity of the present project area (8ES66, 8ES1424, 8ES1426, 8ES1432, 8ES1435, 8ES1531). It should be emphasized that the Archaeological Sensitivity Map Survey did not include any intrusive survey techniques, and in many instances was based solely on informant interviews.

Fort Redoubt (8ES66) is located approximately 490 meters (1,600 ft) southeast of the project area. This is a brick and earth-filled fort constructed between 1845 and 1859. According to the site form and information from the National Park Service (NPS), the fort was used as an ordnance depot during the Civil War. No archaeological investigations have been conducted at the fort. At the time of our survey the outside of the fort was undergoing pressure washing. Exposed sands and surface artifacts reported by Olvey (Olvey et al. 2001) are still visible.

Site 8ES1424 is reportedly an encampment associated with the Mississippi regiment stationed at Pensacola during the Civil War. The site was identified through informant interview and surface collections made by NASP employees. Later excavations in the area revealed that the collections came from an area west of the site and that the site is probably underneath a runway (Olvey et al. 2001). Site 8ES1424 is in the airfield approximately 730 meters (2,400 ft) west of the project area.

Site 8ES1426 is a destroyed site near the southwest corner of the project area (approximately 365 m [1,200 ft]). Civil War artifacts and historic refuse were reported in the area. A canal paralleling the paved road is likely part of the same canal seen near site 8ES1435 (below). Push piles, sand mining, and other commercial and residential development have obliterated the site.

Site 8ES1432 is north of the A.C. Read Golf Course on Bayou Grande, approximately 730 meters (2,400 ft) east of the project area. The site is an artifact scatter of Late Woodland sherds and Civil War bullets. Phase I survey in 2000 determined that the site has been severely impacted by erosion and golf course construction activities and is not eligible for the NRHP (Mozingo and Whitley 2000).

Site 8ES1435 was relocated during the current investigations and is discussed below.

Site 8ES1531 is immediately north (120 m [400 ft]) of the project area. This site is listed as a historic campsite, although this determination was based on surface collections and is only an educated guess (Olvey et al. 2001). The site is on higher ground adjacent to Bayou Grande, and according to a park attendant is also a superfund site. Phase I survey is needed to determine the actual extent of site 8ES1531 and its significance.

Other sites recorded in the A.C. Read Golf Course include 8ES2965, 8ES2968, and 8ES2969 (Mozingo and Whitley 2000). Site 8ES2965 is a light scatter of Late Woodland Weeden Island I artifacts. It is not recommended eligible for the NRHP. Site 8ES2968 is a historic artifact scatter. It is also not recommended eligible for the NRHP. Site 8ES2969 is a Late Woodland Weeden Island I mound and village site. Shovel testing revealed a high potential for intact deposits and the site is recommended eligible for the NRHP.

Archaeological Field Survey Results

Brockington and Associates archaeologists excavated 191 shovel tests within the project area. Twelve shovel tests were positive, including four within site 8ES1435. Additionally, a five-minute surface collection was made over site 8ES1435 by the entire crew. A deliberate attempt was made to find ceramics and bottles with makers' marks or other diagnostic artifacts that might allow us to positively identify and date the site. For this reason the surface collection should not be considered a random or unbiased sample of materials. Unfortunately, due to a faulty camera, photos of a sample of bottles that were not collected and photos of the site could not be developed.

A GIS-produced map was provided by NASP cultural resource manager Gary Sweppenhiser marking the approximate boundaries of a 1960s sanitary landfill. As a result of our testing we can correct the boundary line for this area. Trash deposits extend south to Taylor Road, and west into the southern half of the project area (Figure 4). A large earthen berm (approximately 2 meters/6.5 ft high) marks the northernmost extent of the landfill. Our shovel tests encountered modern debris at depths of 60 cm to 1 meter (23.6-39.4 in) below ground surface. In several areas the trash appeared burned. Metal, glass, plastic and other debris have been compacted into a heterogeneous layer up to 25 cm (9.8 in) thick. Much of the refuse area has been capped with sterile red clay. The current vegetation over the area is thick secondary growth of privet and scrub oaks, with a dense undergrowth of briars and vines. An alleged earlier refuse dump to the north of the 1960s landfill was not located in our survey, and likely lies to the east of the project area.

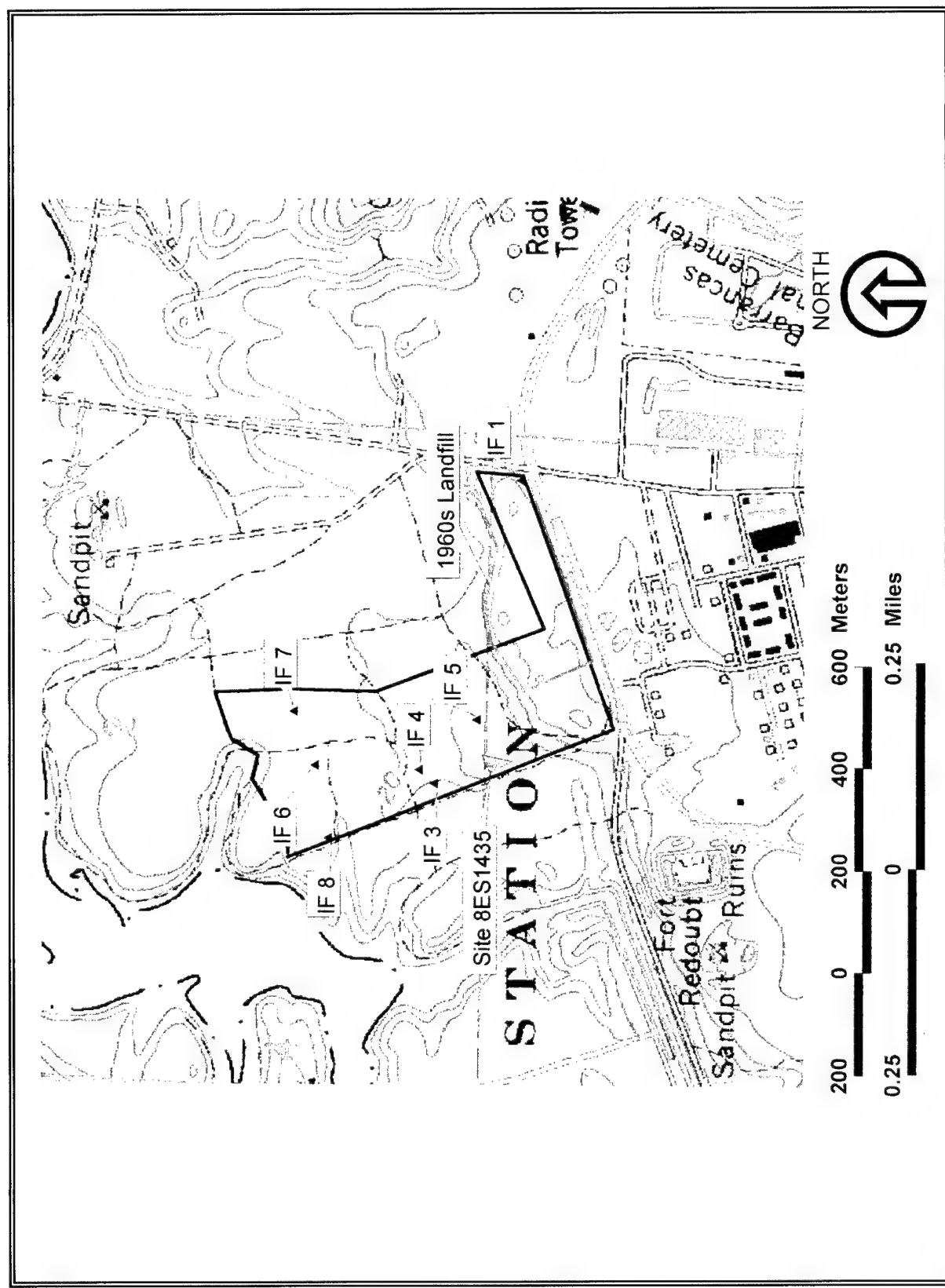


Figure 4. Site 8ES1435 and Isolated Finds within project area.

Site 8ES1435

Cultural Affiliation: Mid-Late Nineteenth, Early Twentieth Century American

Site Type: Redeposited refuse; Historic/Modern informal refuse dump

Soil Type: Sand

Elevation: <6 meters (20 ft) amsl

Landform: Stabilized beach terrace/Dune

Nearest Water Source: Bayou Grande

UTM Coordinates: Zone 16 N3358442 E471626

Site Size: 60 N-S by 60 E-W meters (197 by 197 ft)

Vegetation: Secondary growth forest

NRHP Recommendation: Not eligible

Site 8ES1435 is located approximately 250 meters (820 ft) north of the southwestern corner of the project area (Figure 5). It is approximately 30 meters (98.4 ft) south of the edge of the clear zone for the airfield. The site boundaries are based on shovel testing and pedestrian survey. The site has been heavily impacted by earth-moving activities as evidenced by inverted and mixed stratigraphy and push piles located in several areas of the site. A push pile at the eastern edge of the site has historic ceramic deposits identical to those found 60 meters (197 ft) to the west, suggesting that the deposited materials were further disturbed after they were dumped at the present location.

The site was identified in the field through surface collections and shovel testing. Due to the highly disturbed nature of the deposits, artifacts were first encountered in a shovel test immediately north of a drainage ditch or aqueduct approximately 35 meters (114.8 ft) south of the main concentration of deposits. The ditch probably existed prior to the dumping episodes that produced the site, as evidenced by a lack of cultural materials south of this feature. A large surface collection was made in addition to the four positive shovel tests excavated in the area of the dump. Surface finds not collected included many modern and historic bottles, window glass, reinforced window glass, large fragments of concrete, chicken wire, barbed wire, several 20-30 gallon drums, a buried cast-iron claw-footed bathtub, lengths of PVC pipe, and bricks. We delineated the site boundaries by noting the extent of surface deposits and ground disturbances.

Stratigraphy across the site has been highly impacted by earth-moving activities. Two levels of materials were noted in ST 15 (Prov. 5.1) (Figure 6). Here, 0 to 10 cm of dark brown (10YR3/3) sandy loam is over 10 cm (3.94 in) of dark reddish brown (5YR3/2) sandy artifact producing midden. This layer contains copious amounts of oxidized metal and bottle and window glass. A 30-cm (11.82 in) layer of black (10YR2/1) artifact producing midden lies beneath the dark reddish brown layer. This second midden also contains oxidized metal fragments, bottles, glass, nails, and other identifiable artifacts including a pocket-knife blade, a glass insulator, a WWI brass button, and the jacket of a .45 caliber bullet, to name but a few. Below the second midden is 10 cm (3.94 in) of black and white (10YR2/1 - 10YR8/1) mottled sand over 40 cm (15.76 in) of white (10YR8/1) sand, becoming sterile yellow (10YR7/6) sand at 1 meter (3.2 ft).

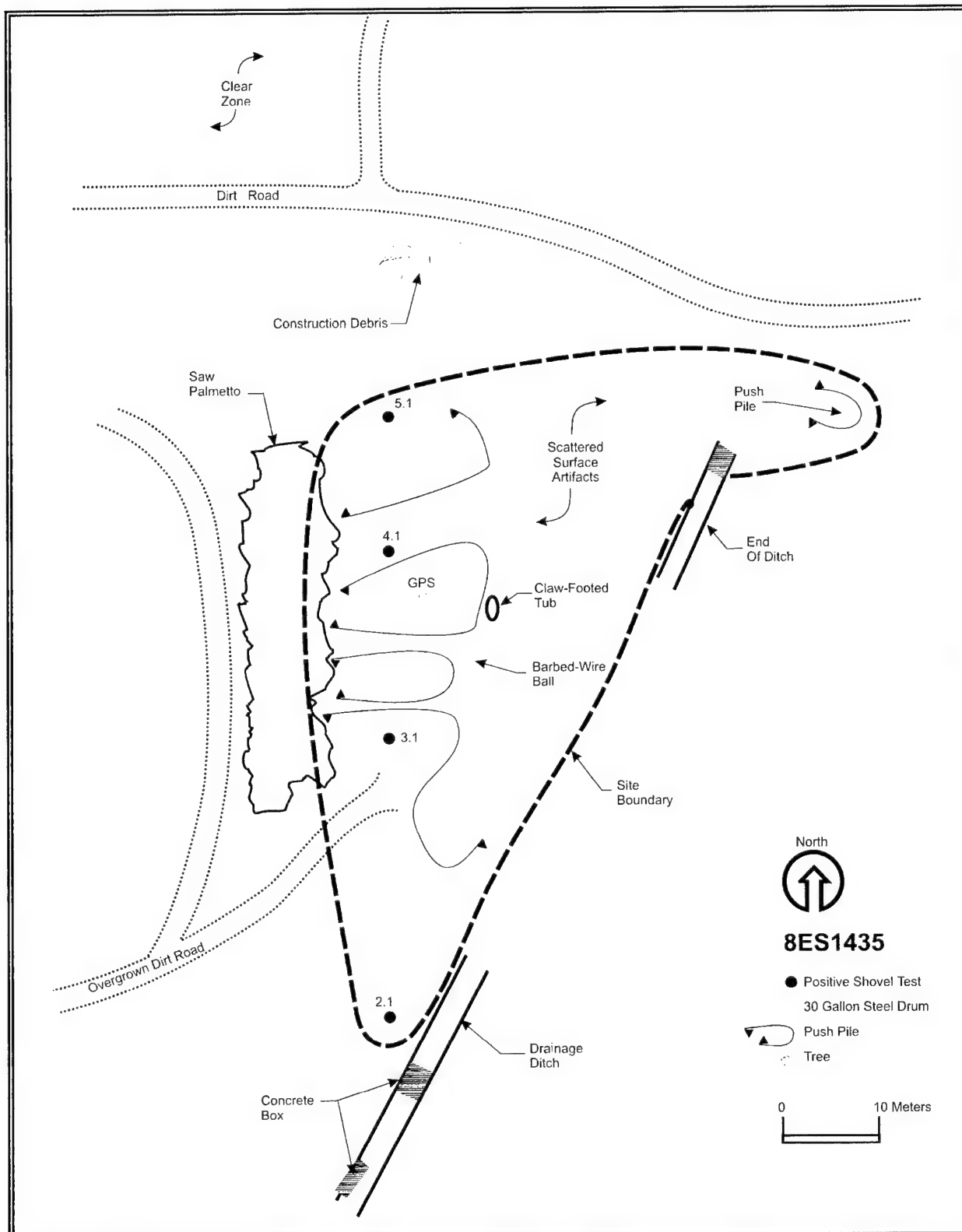


Figure 5. Plan map of site 8ES1435.

The historic component of site 8ES1435 is allegedly the remnants of a hospital. The site form reports that artifacts from a nineteenth- to twentieth-century hospital were collected by unknown persons. More artifacts indicative of a hospital context may be missing due to these past uncontrolled collections. There is no description of what these artifacts were, or where any existing collections are. No records of the hospital exist, including any information of dates of construction and demolition, or even the original location. The previous site form and location were based on informant interviews and not intrusive survey or testing. There remains the possibility that these materials are not from a hospital, and that local tradition is incorrect.

The artifact assemblage of site 8ES1435 consists of a mixture of modern and historic debris. Artifacts that are potentially diagnostic of a hospital include a glass syringe and a glass bottle stopper

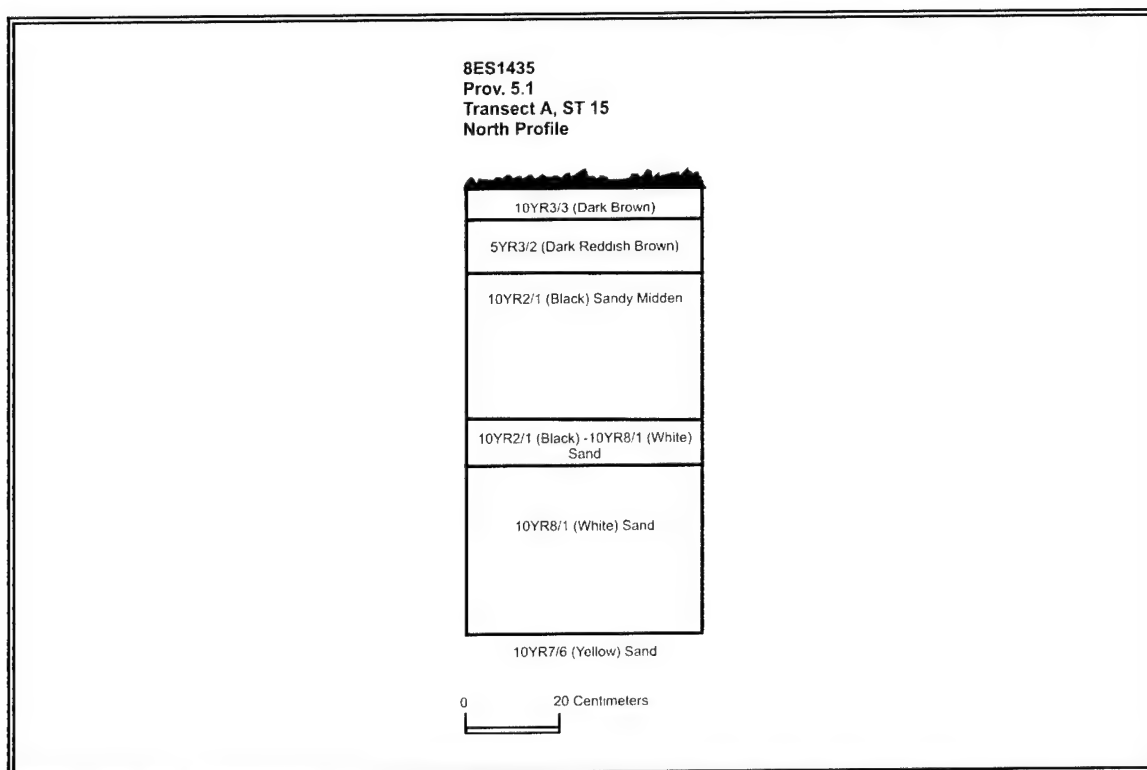


Figure 6. Site 8ES1435, north profile, Prov. 5.1.

(Figures 7 and 8). An intact blue Phillips Milk of Magnesia bottle (produced post-1924) was also recovered from the surface. Several fragments of porcelain bowls and plates with datable makers' marks are likely from military contexts. One such porcelain bowl was recovered from the surface of the site (Prov. 1.0) with the makers' mark "USQMC McNichol China Clarksburg W. Va. January 6, 1936." Other collected surface artifacts include a unidentifiable porcelain vessel with a makers' mark of "Shenango, PA, CHINA 1925." Both McNichol and Shenango produced "hotel wares" (heavy, durable semi-porcelains) (Lehner 1988).

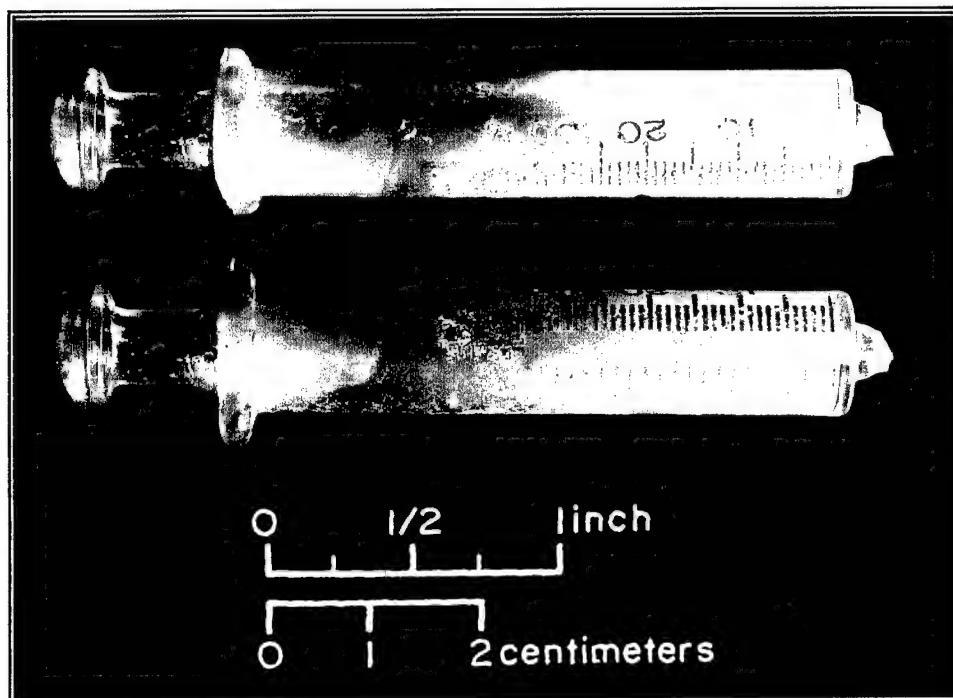


Figure 7. Glass syringe, Prov. 4.1.

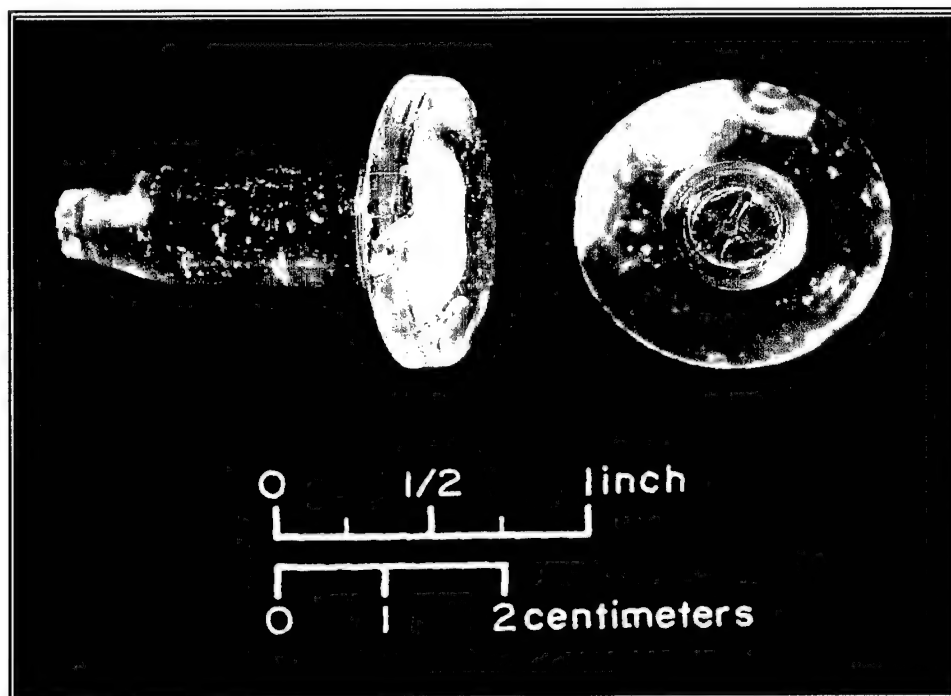


Figure 8. Bottle stopper, Prov. 4.1.

Other artifacts may be more indicative of domestic or residential usage. A Fairmont perfume bottle produced between 1945 and 1960 is part of the surface collection. A cologne-type bottle recovered from Prov. 5.1 was produced between 1920 and 1963. Modern bottles noted at the site included Canada Dry, Tabasco, and Budweiser, in addition to a wide assortment of modern liquor bottles. Appendix A provides a short description of the artifacts from 8ES1435 by provenience.

It is not likely that the present location of the debris is the original location of a building. No substantial evidence of foundations, roads, or other features one would expect to find with any substantial building, hospital or otherwise, were discovered in our excavations at the site. Furthermore, the deposits of modern debris intermixed with historic artifacts suggests that materials were brought to the present location from elsewhere. A map from 1951 reportedly shows the location of a modern refuse dump in the area. Truckloads of logs, stumps, broken cement, and other types of debris are currently brought to the clear zone west of the project area. It is likely that the entire area west of the formal 1960s landfill has been an informal/formal dumping area for many years.

Based on results of archaeological investigations, site 8ES1435 is recommended not eligible for the NRHP. Site 8ES1435 is a multiuse (historic/modern refuse dump) archaeological site. To be eligible for the NRHP, an archaeological site must possess artifacts in or near their original depositional location that can be employed to determine the past use of the locale and the approximate date of its past use. As noted above, the entirety of site 8ES1435 has been heavily impacted by land-moving activities. These activities have mixed the historic and modern deposits to an extent that distinguishing between disposal episodes and separating artifact assemblages into temporally discrete clusters is impossible. Deposits at the site are not *in situ*, and it is very unlikely that there are any intact features. No further archaeological investigation should be required and archaeological clearance is recommended for 8ES1435.

Isolated Finds

Seven isolated finds were recovered in the project area (see Figure 4). Four of these were bullets, including: a .57 caliber 3-ringed, lube-grooved, Federal Minie bullet; a machine-made, 3-ringed, lube-grooved, swaged bullet; a .45 caliber automatic Colt pistol bullet; and a .38 caliber pistol bullet. The remaining isolates included a shard of purple bottle glass, a fragment of unidentifiable iron/steel, and a small sample of modern debris from the 1960 landfill. No attempts were made to delineate the isolated bullets or the 1960 landfill sample. Additional shovel tests around the purple glass and the metal fragment were negative.

The high number of bullets recovered in shovel tests is somewhat notable. Two of the bullets (the .57 caliber Federal Minie bullet and the 3-ringed bullet) likely originated from the Civil War encampment (8ES1424) to the west of the project area (see above). As the effective volley range of Civil War rifled muskets was a maximum of 500 yards (457 m) it is possible that these bullets are from drills or hunting conducted outside of the camp (Americana 76 1997). The other two bullets

are modern and may be a product of military training or drills conducted in the area over the years. A metal detector survey was not called for in the scope of work, nor was one allowed for in the budget. While a metal detector survey would likely yield many more bullets, it is unlikely that this type of information could be useful in interpreting past uses of the site beyond what is already available in written records. The few surviving maps that include the project area do not note it as a battlefield, rifle range, encampment, or any other military area apart from a landfill (see above). These maps are curated at NASP, and can also be reviewed in Whitley and Mullins (1999).

Conclusions and Recommendations

Brockington and Associates, Inc., performed an intensive historical resources survey (Phase I) within the proposed expansion site for the Fort Barrancas National Cemetery, at the Naval Air Station Pensacola (NASP), Escambia County, Florida. We conducted these investigations for the US Army Corps of Engineers, Mobile District. Survey of the project's area of potential effect (APE) was completed in compliance with Section 106 of the National Historic Preservation Act of 1966 and with regulations implementing this legislation (36 CFR Part 800: *Protection of Historic Properties*). Background research and archaeological survey were used to identify potentially significant resources in the project's APE. The survey resulted in the identification of one previously identified archaeological site (8ES1435).

Site 8ES1435 was previously mis-plotted in the NASP Archaeological Sensitivity Map Survey. Our investigations have corrected the location of the historic/modern refuse dump. We also discovered that the site has been heavily impacted by earth-moving activities which have mixed cultural deposits and widely distributed them across a broad area. Our investigations do not enable us to confirm whether materials deposited at the site are the remains of the "Old Hospital." The extent of damage to and uncontrolled collecting of the cultural deposits may make this question impossible to answer with any certainty. Based on results of archaeological investigations, site 8ES1435 is recommended not eligible for the NRHP.

References Cited

Albert, Alphaeus H.

- 1976 *Record of American Uniform and Historical Buttons*. Boyertown Publishing Company, Boyertown, Pennsylvania.

Americana 76

- 1997 *An Introduction to Small Arms of the Civil War*. Leesburg, New Jersey.

Anderson, David G.

- 1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*. University of Alabama Press, Tuscaloosa.

- 1996 Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *The Paleoindian and Early Archaic Southeast*. Edited by D. Anderson and K. Sassaman, University of Alabama Press, Tuscaloosa.

Anderson, David G., and J. W. Joseph

- 1988 *Prehistory and History Along the Upper Savannah River*. Interagency Archaeological Services, National Park Service, Atlanta.

Barker, Alex W., and Timothy R. Pauketat (editors)

- 1992 *Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*. Archaeological Papers of the American Anthropological Association #3.

Bender, Barbara

- 1978 Gatherer-Hunter to Farmer: A Social Perspective. *World Archaeology* 10:204-222.

Bense, Judith A.

- 1989 *The Pensacola Archaeological Survey and Summary of Archaeological Information in Pensacola to 1988*. Technical Report, Volume 1. Pensacola Archaeological Society, Pensacola, Florida.

Bense, Judith A. and Harry J. Wilson

- 1999 *Archaeology and History of the First Spanish Presidio: Santa Maria de Galve in Pensacola, Florida (1698-1719)*. Report of Investigations Number 67, Archaeology Institute, University of West Florida, Pensacola, Florida.

Braley, Chad O.

- 1979 *Archaeological Investigations at Fort Barrancas, Bateria San Carlos, and Advanced Redoubt in the Fort's Section, Gulf Islands National Seashore*. Report Submitted to the National Park Service, Tallahassee, by the Southeastern Conservation Archaeology Center, Florida State University.

Binford, Lewis R.

- 1968 Post-Pleistocene Adaptations. In *New Perspectives in Archaeology*. Edited by S. Binford and L. Binford, Aldine, Chicago.

Brose, David S.

- 1984 Mississippian Period Cultures in Northwestern Florida. In *Perspectives on Gulf Coast Prehistory*. Edited by D. Davis, Ripley P. Bullen Monographs in Anthropology and History Number 5, Florida State Museum, University of Florida Press, Gainesville.

Bullen, Ripley P.

- 1975 *A Guide to the Identification of Florida Projectile Points*. Kendall Books, Gainesville, Florida.

Butler, William B.

- 1987 Significance and Other Frustrations in the CRM Process. *American Antiquity* 52(4):820-829.

Coleman, James and Irene S. Coleman

- 1982 *Guardians on the Gulf: Pensacola Fortifications, 1698-1980*. Pensacola Historical Society, Pensacola, Florida.

Coker, William S.

- 1984 The Village on the Red Cliffs. In *Pensacola History Illustrated*, Volume I, No. 2., pp.22-26. Pensacola Historical Society, Pensacola, Florida.
- 1996 Pensacola; 1686-1763. In *The New History of Florida*, edited by Michael Gannon, pp.117-133. University Presses of Florida, Gainesville.

Coker, William S. and R. Wayne Childers

- 1998 Presidio Santa María de Galve: The First Permanent European Settlement on the Northern Gulf Coast, 1698-1722. In *Santa María de Galve: A Story of Survival*, edited by Virginia Parks, pp.11-98. Pensacola Historical Society, Pensacola, Florida.

Curren, Caleb, Steve Newby and Steve Smith

- 1998 *Woolsey Archaeology: Construction Monitoring at an Early American Navy Town Site*. Report submitted to the United States Navy, Naval Air Station Pensacola, CNET Technical Training Complex by Pensacola Archaeology Lab, Pensacola.

Cusick, James

- 1986 *316 S. Baylen Street: The British Period in Pensacola*. Paper presented at the Florida Anthropological Society Annual Meeting. University of Florida, Gainesville.

DePratter, Chester B.

- 1991 *Late Prehistoric and Early Historic Chiefdoms in the Southeastern United States*. Garland Press, New York.

Dragoo, Don W.

- 1975 Some Aspects of Eastern North American Prehistory: A Review. *American Antiquity* 41(1):3-27.

Dibble, Ernest

- 1974 Antebellum Pensacola and the Military Presence. Pensacola Bicentennial Series, *Pensacola News Journal*, Pensacola.

Doran, Glen H. and David N. Dickel

- 1988 Multidisciplinary Investigations at the Windover Site. In *Wet Site Archaeology*. Edited by B. Purdy, Telford Press, Caldwell, NJ.

Dunbar, James S.

- 1991 Resource Orientation of Clovis and Suwannee Age Paleoindian sites in Florida. In *Clovis: Origins and Adaptations*. Edited by R. Bonnichson and K. Turnmier, Center for the First Americans, Oregon State University, Corvallis.

Dunnell, Robert C.

- 1971 *Systematics in Prehistory*. Free Press, New York.

Fagan, Brian

- 1988 *In the Beginning: An Introduction to Archaeology*. Scott, Foresman and Company, Glenview, IL.

Faye, Stanley

- 1942 *British and Spanish Fortifications of Pensacola, 1781-1821*. Florida Historical Quarterly 20 (2): pp. 277-292.

- Fernald, Edward A. and Elizabeth D. Purdham (editors)
1992 *The Atlas of Florida*. University Press of Florida, Gainesville.
- Fike, Richard E.
1987 *The Bottle Book*. Gibbs M. Smith, Inc., Layton, Utah.
- Glassow, Michael A.
1977 Issues in Evaluating the Significance of Archaeological Resources. *American Antiquity* 42:413-420.
- Gougeon, Ramie A.
1999 *Mississippian Socio-Political Complexity as Historical Structure*. Paper presented at the 56th Southeastern Archaeological Conference, Pensacola, FL.
- Griffin, James B.
1967 Eastern North American Archaeology: A Summary. *Science* 156:175-191.
- Hally, David J.
1994 An Overview of Lamar Culture. In *Ocmulgee Archaeology 1936-1986*, edited by David J. Hally, pp. 144-174. The University of Georgia Press, Athens.
- Historic Property Associates (HPA)
1986 *Architectural and Historical Survey of Naval Air Station, Pensacola*. St. Augustine, Florida.
- Hudson, Charles
1997 *Knights of Spain, Warriors of the Sun*. University of Georgia Press, Athens.
- Hudson, Charles M., Marvin T. Smith, David J. Hally, Richard Polhemus, and Chester B. DePratter
1985 Coosa: A Chiefdom in the Sixteenth Century United States. *American Antiquity* 50:723-737.
- Janus Research/Piper Archaeology
1993 *Archaeological Assessment Survey of the Proposed CNET Training Complex, US Naval Air Station Pensacola, Escambia County, Florida*. Report submitted to Grenier, Inc. by Janus Research/Piper Archaeology, St. Petersburg.
- Jones, Olive, and Catherine Sullivan
1985 *The Parks Canada Glass Glossary*. National Historic and Sites Branch, Parks Canada.

- Jordan, William R., Connie Huddleston, and Alana Lynch
 2000 *The First Pensacola Lighthouse: Archaeology of a Keeper's Residence*. Report prepared by Brockington and Associates, Inc. for the US Army Corps of Engineers, Mobile District, Mobile, Alabama.
- Kintigh, Keith W.
 1988 The Effectiveness of Subsurface Testing: A Simulation Approach. *American Antiquity* 53:686-707.
- Knight, Vernon J., Jr.
 1990 Social Organization and the Evolution of Hierarchy in the Southeastern Chiefdoms. *Journal of Anthropological Research* 46:1-23.
- Lehner, Lois
 1988 *Lehner's Encyclopedia of U. S. Marks on Pottery, Porcelain, and Clay*. Collector Books. Paducah, Kentucky.
- Lynch, Mark B.
 1980 Site Artifact Density and the Effectiveness of Shovel Probes. *Current Anthropology* 21:516-517.
- Marshall, R.A. (editor)
 1987 *The Emergent Mississippian: Proceedings of the Sixth Mid-South Conference Archaeological Conference, June 6-9, 1985*. Mississippi State University, Cobb Institute of Archaeology, Occasional Papers no. 87-01.
- McKee, W. Reid and M. E. Mason, Jr.
 n.d. *Civil War Projectiles II: Small Arms and Field Artillery*.
- Milanich, Jerald T.
 1994 *Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.
- Milanich, Jerald T., Ann S. Cordell, Vernon J. Knight, Jr., Timothy A. Kohler, and Brenda J. Sigler-Lavelle
 1984 *McKeithen Weeden Island: The Culture of Northern Florida, AD 200-900*. Academic Press, New York.
- Mozingo, Dea, and Thomas G. Whitley
 2000 *Phase I Archaeological Survey: Proposed Year 2000 Alterations to the A. C. Read Golf Course, Naval Air Station Pensacola, Escambia County, Florida*. Report prepared by Brockington and Associates, Inc. for the US Army Corps of Engineers, Mobile District, Mobile, Alabama.

Mullins, Deborah R.

- 1998 *The Archaeology of Colonial Pensacola Residential Lots*. Paper on file, Archaeology Institute, University of West Florida.

Nance, Jack D.

- 1979 Regional Subsampling and Statistical Inferences in Forested Habitats. *American Antiquity* 44(1):172-179.

Nance, Jack D., and Bruce Ball

- 1986 No Surprises? The Reliability and Validity of Test Pit Sampling. *American Antiquity* 51(3):457-483.

Neill, Wilfred T.

- 1964 Trilisa Pond, an Early site in Marion County, Florida. *Florida Anthropologist* 17:187-200.

Olvey, Whitney, and Bruce G. Harvey

- 2001 *Cultural Resources Phase I Survey for the Proposed Campground Expansion, Naval Air Station Pensacola, Escambia County, Florida*. Report prepared by Brockington and Associates, Inc. for the US Army Corps of Engineers, Mobile District, Mobile, Alabama.

Olvey, Whitney, Connie Huddleston, and Thomas G. Whitley

- 2001 *Cultural Resources Data Management, Naval Air Station Pensacola, Escambia County, Florida*. Draft report prepared by Brockington and Associates, Inc. for the US Army Corps of Engineers, Mobile District, Mobile, Alabama.

Pavao-Zuckerman, Barnet

- 2000 Vertebrate Subsistence in the Mississippian-Historic Transition. *Southeastern Archaeology* 19(2):135-144.
- 2001 *Culture Contact and Subsistence Change at Fusihatchee (1EE191)*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Georgia, Athens.

Pearce, George F.

- 1980 *The US Navy in Pensacola: From Sailing Ships to Naval Aviation (1825-1930)*. University of West Florida Foundation, Pensacola.

Peebles, Christopher S.

- 1986 *Paradise Lost, Strayed, and Stolen: Prehistoric Social Devolution in the Southeast. In The Burden of Being Civilized: An Anthropological Perspective on the Discontents of Civilization.* Edited by M. Richardson and M.C. Webb, Southern Anthropological Society Proceedings 18, University of Georgia Press, Athens.

Pintado, Vincente Sebastián

- 1816 Plan of Pensacola and Their Environs, 1816. John C. Pace Library, Special Collections, Map on file, University of West Florida.

Potter, Elisabeth Walton, and Beth M. Boland

- 1992 *Guidelines for Evaluating and Registering Cemeteries and Burial Places.* National Register Bulletin 41, U.S. Department of the Interior, National Park Service, Washington, DC.

Reitz, Elizabeth J.

- 1990 Zooarchaeology. In *The Development of Southeastern Archaeology*, edited by J.K. Johnson, pp. 109-131. University of Alabama Press, Tuscaloosa.

Sassaman, Kenneth E.

- 1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology.* University of Alabama Press, Tuscaloosa.

Savage, Beth L. and Sarah Dillard Pope

- 1998 *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.* US Department of the Interior, National Park Service, Washington, D.C.

Sherfy, Marcella and W. Ray Luce

- n.d. *Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years.* National Register Bulletin 22, U.S. Department of the Interior, National Park Service, Washington, DC.

Smith, Bruce D.

- 1990 *The Mississippian Emergence.* Smithsonian Institution Press, Washington DC.

Smith, Marvin T.

- 1987 *Archaeology of Aboriginal Culture Change in the Interior Southeast: Depopulation During the Early Historic Period.* University of Florida Press, Gainesville.

- Smith, Roger C., John Bratten, J. Cozzi, and Keith Plaskett
1998 *The Emanuel Point Ship Archaeological Investigations: 1997-1998*. Archaeology Institute, Report of Investigations Number 68, and Bureau of Archaeological Research, Division of Historical Resources.
- Stoltman, James B.
1978 Temporal Models in Prehistory: An Example From Eastern North America. *Current Anthropology* 19(4):703-746.
- Stringfield, Margo S.
1996 *Wells in Colonial Pensacola, Florida*. MA Thesis, University of West Florida.
- Swann, Brenda
1998 Field Notes 8ES1354 Presidio Santa María de Galve. Notes on file, Archaeology Institute, University of West Florida.
- Toulouse, Julian Harrison
1971 *Bottle Makers and Their Marks*. Thomas Nelson Inc., New York.
- Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. National Register Bulletin 36, U.S. Department of the Interior, National Park Service, Washington, DC.
- United States Army Corps of Engineers (USACE, Mobile District)
1987 *Cultural Resource Assessment, Local Area Network Coaxial Cable Route, Pensacola Naval Air Depot, Florida*. Report prepared by Environmental Resources Planning Section, US Army Corps of Engineers, Mobile District, Mobile, Alabama.
- 1990 *A Historical Resources Survey Proposed Fuel Tank Farm and JP-5 and Diesel Pipeline, Naval Air Station, Pensacola, Florida*. Report prepared by Environmental Resources Planning Section, US Army Corps of Engineers, Mobile District, Mobile, Alabama.
- 1992a *Sand Crabs and Gosports: Phase II Excavations at 8ES1436 Old Warrington Proposed Survival Training Building, Naval Air Station Pensacola, Escambia County, Florida*. Report prepared by Environmental Resources Planning Section, US Army Corps of Engineers, Mobile District, Mobile, Alabama.

USACE, Mobile District (continued)

1992b *Archaeological Investigations of Underground Electrical Utilities and Fort San Carlos de Austria, Site 8ES1354 Naval Air Station, Pensacola, Florida*. Report prepared by Environmental Resources Planning Section, US Army Corps of Engineers, Mobile District, Mobile, Alabama.

1995 *Archaeological Investigations of the Building 631 Parking Lot Expansion, Pensacola Navy Yard, Naval Air Station Pensacola, Escambia County, Florida*. Report prepared by Environmental Resources Planning Section, US Army Corps of Engineers, Mobile District, Mobile, Alabama.

Wagner, Gail E.

1995 *Mississippian Plant Remains from the Tidewater Site (38HR254), Horry County, South Carolina*. Department of Anthropology, University of South Carolina, Ethnobotanical Laboratory Report No. 6, Columbia, SC.

Webb, S. David, Jerald T. Milanich, Roger Alexon, and James Dunbar

1984 *A Bison Antiquus Kill Site, Wacissa River, Jefferson County, Florida*. *American Antiquity* 49:384-392.

Whitley, Thomas G., and Deborah Mullins

1999 *Phase I Archaeological Resources Survey for the Proposed Geothermal Heat Pump Locations and Park Space, Pensacola Naval Air Station, Escambia County, Florida*. Report prepared by Brockington and Associates, Inc. for the US Army Corps of Engineers, Mobile District, Mobile, Alabama.

Wing, Elizabeth S. and Antoinette Brown

1979 *Paleonutrition: Method and Theory in Prehistoric Foodways*. Academic Press, New York.

Wilson, Harry J.

1997 *Land Use and Landscape Evolution and the Effect on the Archaeological Remains of the Presidio Santa María de Galve, Pensacola, Florida*. Paper presented at the Southeastern Archaeological Conference, Baton Rouge, Louisiana.

Wood, Peter H.

1989 *The Changing Population of the Colonial South: An Overview by Race and Region, 1685-1790*. In *Powhatan's Mantle: Indians in the Colonial Southeast*. Edited by P.H. Wood, G.A. Waselkov, and M.T. Hatley, University of Nebraska Press, Lincoln.

Yarnell, Richard A.

- 1993 The Importance of Native Crops during the Late Archaic and Woodland Periods. In *Foraging and Farming in the Eastern Woodlands*. Edited by C.M. Scarry, University Press of Florida, Gainesville.

Appendix A. Artifact Catalog

Artifact Catalog

Brockington and Associates, Inc. uses the following proveniencing system. Provenience 1 designates general surface collections. Numbers after the decimal point designate subsequent surface collections, or trenches. Proveniences 2 to 200 designate shovel tests. Controlled surface collections and 50 by 50 cm units are also designated by this provenience range. Proveniences 201 to 400 designate 1 by 1 m units done for testing purposes. Proveniences 401 to 600 designate excavation units (1 by 2 m, 2 by 2 m, or larger). Provenience numbers over 600 designate features. For all provenience numbers except 1, the numbers after the decimal point designate levels. Provenience X.0 is a surface collection at a shovel test or unit. X .1 designates level one, and X.2 designates level two. For example, 401.2 is Excavation Unit 401, level 2. Flotation samples are designated by a 01 added after the level. For example, 401.201 is the flotation material from Excavation Unit 401, level 2.

Table of Contents

Site Number	Page Number
8ES1435	A - 1
Isolates	A - 3

SITE NUMBER: 8ES1435

PROVENIENCE NUMBER: 1, 0 Transect A, surface

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	3		undecorated porcelain	industrial with makers marks: 1- bowl with "USQMC 3794-P-20", 1- bowl with "USQMC McNichol China Clarksburg W.Va. January 6, 1936", 1- cup with "Shenango, Newcastle, PA, CHINA 1925"
2	2		undecorated porcelain	industrial
3	1		annular porcelain	red industrial
4	2		color glazed whiteware	green
5	1		clear machine made bottle glass	whole- half pint Calvert liquor bottle
6	1		cobalt blue machine made bottle glass	medicine bottle, "Milk of Magnesia, the CHAS.H. Phillips Chemical Co., Glenbrook, Conn., Made in USA 4 L M"
7	1		clear machine made bottle glass	whole, Fairmont bottle and glass Co. 1945 to 1960, Toulouse 1971: 201
8	2		clear machine made bottle glass	whole, 1- probable sauce bottle "53...2" on bottom, 1- "1" on bottom, "Eagle" on side

PROVENIENCE NUMBER: 2, 1 Transect A, Shovel Test 11, 0-10cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	2		unidentified burned ceramic	
2	1		clear bottle glass	
3	2		unidentifiable metal fragment	tin

PROVENIENCE NUMBER: 3, 1 Transect A, Shovel Test 13, 0-20cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1		undecorated porcelain	with makers mark, "M.C. 431-QM 1526"
2	1		olive green bottle glass	

Site Number: 8ES1435

3	1	amber bottle glass
4	2	clear bottle glass
5	1	light green bottle glass
6	1	light green flat (window) glass
7	3	clear flat (window) glass

PROVENIENCE NUMBER: 4, 1 Transect A, Shovel Test 14, 0-50cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1		glass stoppers	plain, light green, "club sauce type", Parks Canada Glass Glossary, 1985: 152
2	1		glass syringe	
3	2		antique metal toy	brass whistle, broken, with chain attached

PROVENIENCE NUMBER: 5, 1 Transect A, Shovel Test 15, 0-50cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	6		unidentified burned ceramic	1- white body transfer print, 1-plain porcelain, 3-red annular porcelain, 1-stoneware; 4 rims total
2	2		burned glass	1-cobalt, 1-clear
3	1		green bottle glass	modern soda bottle
4	1		blue bottle glass	
5	1		milkglass fragment	
6	5		clear machine made bottle glass	-molded with "Fe...O..."
7	3		clear machine made bottle glass	embossed, 2-"dairy Co.Q...", 1-"pasteuriz..."
8	3		clear machine made bottle glass	one vessel, molded/embossed with arrows, 1- "The Spot Bottle", 1- "Pat APP for 174 12-8"
9	1		clear machine made bottle glass	molded jug bottle lip and handle
10	2		clear machine made bottle glass	cologne type, 1-lip only, 1- Whole with art deco design and "8...Woodbury...1...CL" embossed on bottom. CL overlapping makers marks design is dated 1920-1963, Carr-Lowrey Glass Co., Toulouse 1971: 135.
11	1		clear machine made bottle glass	whole, "Poythress 1856" embossed on side, "x M(in circle) 1" makers marks on base, Maryland glass corp., Toulouse 1971: 339-340
12	1		clear bottle glass	tax label on side "Florida...7 1/2c", liquor bottle
13		31.00	faunal remains	
14	3		bottle caps	
15	1		unidentifiable ceramic	industrial stoneware? Rockingham/Bennington type glaze, castor? Insulator?
16	1		glass insulator	aqua
17		12.70	unglazed brick fragments	burned
18		5.40	asbestos siding	
19	1		iron pintle (architectural)	
20	3		common wire nail	
21	1		unidentifiable nail	
22	1		ceramic insulator	"Bryant...G5097"

Site Number: 8ES1435

23	1	lead bullet	.45 jacket only
24	1	brass button	general services unifrom button, great seal, WW1, GI 102, Albert 1976:42
25	1	unidentified brass object	bottle opener?
26	1	iron/steel pocket knife	knife blade only
27	1	light bulb glass	filament and glass
28	2	lead/graphite pencil	
29	1	carbon battery core	
30	1	glass vase/figurine	clear
31	3	snuff tin	discarded
32	7	unidentifiable iron/steel	discarded

SITE NUMBER: Isolate 1

PROVENIENCE NUMBER: 2, 0 Transect 1, Shovel Test 1, 0-10cmbs (Sample of dump Debris)

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1		clear bottle glass	
2	1		light green mold blown bottle glass	
3	1		ceramic tile	red bodied
4		25.50	asbestos siding	
5		3.90	oyster	

SITE NUMBER: Isolate 2

PROVENIENCE NUMBER: 2, 1 Transect B, Shovel Test 3, 0-40cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	0		no cultural material	

SITE NUMBER: Isolate 3

PROVENIENCE NUMBER: 2, 1 Segment B, Transect A, Shovel Test 6

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1		purple bottle glass	

SITE NUMBER: Isolate 4

PROVENIENCE NUMBER: 2, 1 Transect C, Shovel Test 13, 0-35cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	2		unidentifiable iron/steel	

SITE NUMBER: Isolate 5

PROVENIENCE NUMBER: 2, 1 Transect D, Shovel Test 15, 0-35cmbs

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1		lead bullet	.45 Automatic Colt Pistol bullet

Site Number: Isolate 6

SITE NUMBER: Isolate 6

PROVENIENCE NUMBER: 2, 1 Transect E, Shovel Test 19, 0-40cmbs

<i>Catalog #</i>	<i>Count</i>	<i>Weight (in g)</i>	<i>Artifact Description</i>	<i>Comments</i>
1	1		lead bullet	.38 pistol, .355 diameter, relatively modern

SITE NUMBER: Isolate 7

PROVENIENCE NUMBER: 2, 1 Transect I, Shovel Test 5, 0-40cmbs

<i>Catalog #</i>	<i>Count</i>	<i>Weight (in g)</i>	<i>Artifact Description</i>	<i>Comments</i>
1	1		lead bullet	Federal Round, .57 diameter, 3-ring lube grooved standard federal Minie bullet

SITE NUMBER: Isolate 8

PROVENIENCE NUMBER: 2, 1 Transect A, Shovel Test 20, 0-30cmbs

<i>Catalog #</i>	<i>Count</i>	<i>Weight (in g)</i>	<i>Artifact Description</i>	<i>Comments</i>
1	1		lead bullet	machine made, 3 ring lube grooved, swaged

Appendix B. Florida Site Form

- ☐ Original
☒ Update
 (give site#)



ARCHAEOLOGICAL SITE FORM

FLORIDA MASTER SITE FILE

Version 2.2 3/97

Consult Guide to Archaeological Site Form for detailed instructions.

Site #8 8ES1435

Recorder Site#

Field Date 08/ 23/ 01

Form Date 10/ 25/ 01

Site Name(s) Old Hospital..... Multiple Listing[DHR only].....
 Project Name Ft. Barrancas Nat'l Cemetery Proposed Expansion..... FMSF Survey #.....
 Ownership: ☐ private-profit ☐ private-nonprofit ☐ private-individual ☐ private-unspecifd. ☐ city ☐ county ☐ state ☒ federal ☐ foreign ☐ Native American ☐ unknown
 USGS 7.5 Map Name & Date 1970 Ft. Barrancas, Florida..... County Escambia.....
 Township Range Section..... ☐ Check if Irregular Section; Qtr. Section (check all that apply): ☐ NE ☐ NW ☐ SE ☐ SW
 Landgrant..... Tax Parcel # (s).....
 City / Town (if within 3 mi.)..... In Current City Limits? ☐ yes ☐ no ☐ unknown
 UTM: Zone X16 ☐ 17 Easting 471626 Northing 3358442
 Address / Vicinity of / Route to Site is located in wooded tract north of Taylor Road, between clear-zone for runways and A.C. Read Golf Course....
 Name of Public Tract (e.g., park).....

TYPE OF SITE (Check all choices that apply; if needed write others in at bottom)

SETTING *

STRUCTURES - OR - FEATURES *

FUNCTION *

- | | | | | | |
|--|---|---|---|--|---|
| <input type="checkbox"/> Land - terrestrial
<input type="checkbox"/> Cave/Sink - subterranean
<input type="checkbox"/> terrestrial
<input type="checkbox"/> aquatic
<input type="checkbox"/> intermittently flooded
<input type="checkbox"/> Wetland - palustrine
<input type="checkbox"/> usually flooded
<input type="checkbox"/> sometimes flooded
<input type="checkbox"/> usually dry <input type="checkbox"/> low energy | <input type="checkbox"/> Lake/Pond - lacustrine
<input type="checkbox"/> River/Stream/Creek - riverine
<input type="checkbox"/> Tidal - estuarine
<input type="checkbox"/> Saltwater - marine
<input type="checkbox"/> marine unspecified
<input type="checkbox"/> [high energy] marine
<input type="checkbox"/> [marine] | <input type="checkbox"/> aboriginal boat
<input type="checkbox"/> agric/farm building
<input type="checkbox"/> burial mound
<input type="checkbox"/> building remains
<input type="checkbox"/> cemetery/grave
<input checked="" type="checkbox"/> dump/refuse
<input type="checkbox"/> earthworks | <input type="checkbox"/> fort
<input type="checkbox"/> midden
<input type="checkbox"/> mill unspecified
<input type="checkbox"/> mission
<input type="checkbox"/> mound unspecified
<input type="checkbox"/> plantation
<input type="checkbox"/> platform mound | <input type="checkbox"/> road segment
<input type="checkbox"/> shell midden
<input type="checkbox"/> shell mound
<input type="checkbox"/> shipwreck
<input type="checkbox"/> subsurface features
<input checked="" type="checkbox"/> surface scatter
<input type="checkbox"/> well | <input type="checkbox"/> none specified
<input type="checkbox"/> campsite
<input type="checkbox"/> extractive site
<input type="checkbox"/> habitation (prehistoric)
<input type="checkbox"/> homestead (historic)
<input type="checkbox"/> farmstead
<input type="checkbox"/> village (prehistoric)
<input type="checkbox"/> town (historic)
<input type="checkbox"/> quarry |
|--|---|---|---|--|---|

HISTORIC CONTEXTS (Check all that apply; use most specific subphases: e.g., if Glades Ia only, don't also use Glades I)

Aboriginal *

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> Alachua
<input type="checkbox"/> Archaic, Early
<input type="checkbox"/> Archaic, Middle
<input type="checkbox"/> Archaic, Late
<input type="checkbox"/> Archaic unspecified
<input type="checkbox"/> Belle Glade I
<input type="checkbox"/> Belle Glade II
<input type="checkbox"/> Belle Glade III
<input type="checkbox"/> Belle Glade IV
<input type="checkbox"/> Belle Glade unspcific.
<input type="checkbox"/> Cades Pond
<input type="checkbox"/> Deptford | <input type="checkbox"/> Englewood
<input type="checkbox"/> Fort Walton
<input type="checkbox"/> Glades Ia
<input type="checkbox"/> Glades Ib
<input type="checkbox"/> Glades I unspcific.
<input type="checkbox"/> Glades IIa
<input type="checkbox"/> Glades IIb
<input type="checkbox"/> Glades IIc
<input type="checkbox"/> Glades II unspcific.
<input type="checkbox"/> Glades IIIa
<input type="checkbox"/> Glades IIIb
<input type="checkbox"/> Glades IIIc
<input type="checkbox"/> Glades III unspcific. | <input type="checkbox"/> Glades unspcific.
<input type="checkbox"/> Hickory Pond
<input type="checkbox"/> Leon-Jefferson
<input type="checkbox"/> Malabar I
<input type="checkbox"/> Malabar II
<input type="checkbox"/> Manasota
<input type="checkbox"/> Mount Taylor
<input type="checkbox"/> Norwood
<input type="checkbox"/> Orange
<input type="checkbox"/> Paleoindian
<input type="checkbox"/> Pensacola
<input type="checkbox"/> Perico Island
<input type="checkbox"/> Safety Harbor | <input type="checkbox"/> St. Augustine
<input type="checkbox"/> St. Johns Ia
<input type="checkbox"/> St. Johns Ib
<input type="checkbox"/> St. Johns I unspcific
<input type="checkbox"/> St. Johns IIa
<input type="checkbox"/> St. Johns IIb
<input type="checkbox"/> St. Johns IIc
<input type="checkbox"/> St. Johns II unspcific
<input type="checkbox"/> St. Johns unspcific
<input type="checkbox"/> Santa Rosa
<input type="checkbox"/> Santa Rosa-Swift Creek
<input type="checkbox"/> Seminole: Colonization
<input type="checkbox"/> Seminole: 1st War To 2d |
|--|--|--|--|

- | | |
|--|--|
| <input type="checkbox"/> Seminole: 2d War To 3d
<input type="checkbox"/> Seminole: 3d War On
<input type="checkbox"/> Seminole unspecified
<input type="checkbox"/> Swift Creek, Early
<input type="checkbox"/> Swift Creek, Late
<input type="checkbox"/> Swift Creek, unspecified
<input type="checkbox"/> Transitional
<input type="checkbox"/> Weeden Island I
<input type="checkbox"/> Weeden Island II
<input type="checkbox"/> Weeden Island unspcific.
<input type="checkbox"/> Prehistoric nonceramic
<input type="checkbox"/> Prehistoric ceramic
<input type="checkbox"/> Prehistoric unspecified | <input checked="" type="checkbox"/> Nonaboriginal *
<input type="checkbox"/> First Spanish 1513-99
<input type="checkbox"/> First Spanish 1600-99
<input type="checkbox"/> First Spanish 1700-1763
<input type="checkbox"/> First Spanish unspecified
<input type="checkbox"/> British 1763-1783
<input type="checkbox"/> Second Spanish 1783-1821
<input type="checkbox"/> American Territorial 1821-45
<input type="checkbox"/> American Civil War 1861-65
<input checked="" type="checkbox"/> American 19th Century
<input checked="" type="checkbox"/> American 20th Century
<input type="checkbox"/> American unspecified
<input type="checkbox"/> African-American |
|--|--|

☐ Other (Less common phases are not check-listed. For historic sites, also give specific dates if known.)

* Consult Guide to Archaeological Site Form for preferred descriptions not listed above (data are [coded fields] at the Site File).

SURVEYOR'S EVALUATION OF SITE

- Potentially eligible for a local register? ☐ yes: name register at right ☒ no ☐ insufficient info Name of local register if eligible:.....
 Individually eligible for National Register? ☐ yes ☒ no ☐ insufficient info
 Potential contributor to NR district? ☐ yes ☒ no ☐ insufficient info
 Explanation of Evaluation (Required if evaluated; limit to 3 lines; attach full justification) Site is heavily disturbed and consists of artifacts not *in situ*. Research further suggests that these may not even be remains from an "Old Hospital" (Gougeon and Whitley 2001).....
 Recommendations for Owner or SHPO Action Recommended not eligible for the NRHP.....

DHR USE ONLY OFFICIAL EVALUATIONS DHR USE ONLY

NR DATE KEEPER-NR ELIGIBILITY: ☐ yes ☐ no Date / /
 SHPO-NR ELIGIBILITY: ☐ yes ☐ no ☐ potentially elig. ☐ insufficient info. Date / /
 DELIST DATE LOCAL DESIGNATION: Date / /
 Local office
 National Register Criteria for Evaluation ☐ a ☐ b ☐ c ☐ d (See National Register Bulletin 15, p. 2)

ARCHAEOLOGICAL SITE FORM

Site 8ES1435 #8

Consult Guide to Archaeological Site Form for detailed instructions.

FIELD METHODS (Check one or more methods for detection and for boundaries)

SITE DETECTION*

- ☐ no field check ☐ exposed ground ☒ screened shovel ☐ bounds unknown
☐ literature search ☐ posthole digger _____ ☐ none by recorder
☐ informant report ☐ auger--size: _____ ☐ literature search
☐ remote sensing ☐ unscreened shovel _____ ☐ informant report

SITE BOUNDARIES*

- ☐ remote sensing ☐ unscreened shovel
☒ insp exposed ground ☒ screened shovel
☐ posthole tests ☐ block excavations
☐ auger--size: _____ ☐ estimate or guess

Other methods; number, size, depth, pattern of units; screen size (attach site plan) Systematic shovel testing (15 m interval), surface collection

SITE DESCRIPTION

Extent Size (m²) 3600 Depth/stratigraphy of cultural deposit Site consists of highly disturbed refuse from historic and modern domestic (?) contexts. Artifacts recovered on surface and to depths of 50 cm bsTemporal Interpretation* - Components (check one): ☐ single ☐ prob single ☐ prob multiple ☐ multiple ☐ uncertain ☐ unknown

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations:

Site was originally described as the remains of an "Old Hospital". We found modern and historic debris scattered over a large, highly disturbed area. There is not much compelling evidence to suggest that these materials are from a hospital, although some medical items were found. Site was also used in the 20th century as a dump, as noted on a 1951 map. Site was previously recorded by the West Florida Archaeological Sensitivity Map Survey, which was not actually a survey. Location of site was based on local informant. Corrected location noted here and in report

Integrity Overall disturbance*: ☐ none seen ☐ minor ☐ substantial ☐ major ☐ redeposited ☐ destroyed-document! ☐ unknown

Disturbances/threats/protective measures Site appears to have been heavily impacted by bulldozers and other earth-moving equipment

Surface: area collected 100 m² # collection units 3 shovel tests; Excavation: # noncontiguous blocks

ARTIFACTS

Total Artifacts # 89 (C)ount or (E)stimate? Surface # _____ (C) or (E) Subsurface # _____ (C) or (E)COLLECTION SELECTIVITY* ARTIFACT CATEGORIES* and DISPOSITIONS* (example: A bone-human)

- ☐ unknown ☐ unselective (all artifacts) Pick exactly one code from Disposition List _____
☒ selective (some artifacts) S bone-animal _____ exotic-nonlocal
☐ mixed selectivity _____ bone-human _____ S_glass
SPATIAL CONTROL* _____ bone-unspecified _____ lithics-aboriginal
☐ uncollected ☒ general (not by subarea) _____ bone-worked _____ S_metal-nonprecious
☐ unknown ☐ controlled (by subarea) O brick/building debris _____ metal-precious/coin
☐ variable spatial control _____ ceramic-aboriginal _____ shell-unworked
☐ Other _____ S ceramic-nonaboriginal _____ shell-worked
_____ daub _____ Others:

Disposition List*

- A - category always collected
S - some items in category collected
O - observed first hand, but not collected
R - collected and subsequently left at site
I - informant reported category present
U - unknown

Artifact Comments

DIAGNOSTICS (Type or mode, and frequency: e.g., Suwanee ppk, heat-treated chert, Deptford Check-stamped, ironstone/whiteware)

1. porcelains N= 7 5. Glass bottle stopper N= 1 9. N= _____
2. bottles N= 8+ 6. .45 caliber bullet jacket N= 1 10. N= _____
3. WWI button N= 1 7. Whiteware frags N= 2 11. N= _____
4. Glass syringe N= 1 8. N= _____ 12. N= _____

ENVIRONMENT

Nearest fresh water type* & name (incl. relict source) Bayou Grande

Distance (m)/bearing

Natural community (FNAI category* or leave blank)

Local vegetation Palmetto and Secondary Growth

Topography* Stabilized beach terrace/dune Min Elevation _____ meters Max Elevation 6.1 _____ meters

Present land use

SCS soil series Soil association

FURTHER INFORMATION

Informant(s): Name/Address/Phone/Email

Describe field & analysis notes, artifacts, photos. For each, give type* (e.g., notes), curating organization*, accession #s, and short description.

All materials will be curated by Alabama Museum of Natural History, Moundville Archaeological Park.

Manuscripts or Publications on the site (Use continuation sheet, give FMSF# if relevant) (see also previous site form)

"Phase I Historical Resources Survey, Proposed Expansion of the Ft. Barrancas Nat'l Cemetery, Naval Air Station Pensacola, Escambia County, Florida" Gougeon, Ramie, and Thomas G. Whitley 2001 Report prepared by Brockington and Associates for USACE.

Recorder(s): Name/Addr./Phone/Email Ramie Gougeon; 6611 Bay Circle Suite 220, Norcross, GA 30071; 770 662 5807

Affiliation* or FAS Chapter Brockington and Associates, Inc.

* Consult Guide to Archaeological Site Form for preferred descriptions not listed above (data are [coded fields] at the Site File).

SITE PLAN & USGS REQUIRED At 1"=300' (1:3600) or larger scale, show: site boundaries, scale, north arrow, datum, test/collection units, landmarks, mappers, date.



FLORIDA MASTER SITE FILE

ARCHAEOLOGICAL SITE FORM

STATE OF FLORIDA
DEPARTMENT OF STATE
Division of Archives, History
and Records Management
AH6E00408-84

☒ Original
☐ Update

SITE NUMBER 8Es1435 COUNTY ESCAMBIA

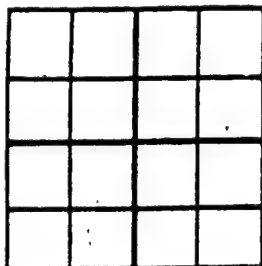
SITE NAME: OLD HOSPITAL

SGS QUAD: FT. BARRANCAS, FL 1970

NOTE: Please attach an 8 1/2" x 11" copy of the appropriate portion of the above map, with site location indicated.

TOWNSHIP/RANGE/SECTION:

Township	Range	Section
3 S	30 W	5



NOTE: The figure to the left represents a regular section (1 square mile); please indicate the location of your site by placing an X in the appropriate portion of the section.

If the section is irregular or part of a land grant, please check below and disregard above instructions.

☒ Irregular section
☐ Land grant

(name)

UTM COORDINATES: Zone 16 Easting Northing

NOTE: If you are unfamiliar with calculating UTM measurements, leave blank.

FRESH WATER SOURCE DISTANCE TO WATER

LOCAL VEGETATION

TOPOGRAPHICAL SETTING

PRESENT LAND USE

LOCAL INFORMANT (Inc. private collections) JOHN FOOT, BASE SURVEYOR

ADDRESS BLDG 3560, NAS

LOCAL INFORMANT (Inc. private collections)

ADDRESS

SURVEY DATE SEPT 88 OTHER MASTER SITE FILE NUMBERS

RECORDER(S) (list principal investigator first) J. BENSE, J. LLOYD, D. JOY

ADDRESS UNIVERSITY OF WEST FLORIDA

PROJECT NAME ARCHAEOLOGICAL SENSITIVITY MAP SURVEY

TYPE OF SITE (check one or more as appropriate):

- | | | |
|---|---|--|
| <input type="checkbox"/> indeterminate | <input type="checkbox"/> mound(s) | <input checked="" type="checkbox"/> historic refuse |
| <input type="checkbox"/> unknown | <input type="checkbox"/> burial mound(s) | <input type="checkbox"/> historic earthworks |
| <input type="checkbox"/> single artifact | <input type="checkbox"/> platform/temple mound(s) | <input type="checkbox"/> shell ring |
| <input type="checkbox"/> artifact scatter | <input type="checkbox"/> canal | <input type="checkbox"/> redeposited |
| <input type="checkbox"/> lithic scatter | <input type="checkbox"/> canoe | <input type="checkbox"/> house/homestead |
| <input type="checkbox"/> midden(s) | <input type="checkbox"/> prehistoric earthworks | <input type="checkbox"/> military |
| <input type="checkbox"/> shell midden(s) | <input type="checkbox"/> prehistoric cemetery | <input type="checkbox"/> historic cemetery |
| <input type="checkbox"/> shell works | <input type="checkbox"/> mission | <input checked="" type="checkbox"/> <u>HOSPITAL REFUSE</u> |

ADDITIONAL REGISTER: Listed Date Determined Eligible Date
 Determined Not Eligible Date Unaccessed

THREATS TO SITE: AIRPORT CONTROL

- ☒ development
- ☒ deterioration
- ☐ borrowing

- ☐ transportation
- ☐ fill
- ☐ dredge
- ☐ logging

- ☒ vandalism
- ☐ phosphate mining
- ☐ agriculture/plowing
- ☐ recreation

REMARKS:

- ☒ preservation recommended
- ☐ severely disturbed/destroyed

☒ recommended for further testing

REPOSITORY UNKNOWN COLLECTORS

BIBLIOGRAPHIC DATA _____

NOTE: Cite any reports referring specifically to this site. General background material need not be cited. Use Florida Anthropologist format.

CULTURAL CLASSIFICATION

CULTURAL PERIOD AMERICAN 1800'S; AMERICAN MID 20th CENT

ARTIFACTS (Check as many as apply): MID-LATE 19th CENT

- | | | |
|--|---|---|
| <input type="checkbox"/> aboriginal ceramics | <input type="checkbox"/> worked shell | <input checked="" type="checkbox"/> brick/bldg materials |
| <input checked="" type="checkbox"/> nonaboriginal ceramics | <input type="checkbox"/> plant remains | <input type="checkbox"/> other human remains (e.g., hair) |
| <input type="checkbox"/> lithics | <input type="checkbox"/> wood | <input type="checkbox"/> leather |
| <input type="checkbox"/> worked bone | <input checked="" type="checkbox"/> metal | <input type="checkbox"/> pollen |
| <input type="checkbox"/> human bone/burial(s) | <input type="checkbox"/> precious metal/coin(s) | <input type="checkbox"/> misc. historic (please list) |
| <input type="checkbox"/> animal bone/unidentified bone | <input checked="" type="checkbox"/> glass | <input type="checkbox"/> misc. prehistoric (please list) |
| <input type="checkbox"/> shell food remains | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

DIAGNOSTIC ARTIFACTS HOSPITAL - MID-LATE 19th CENT; REFUSE DUMP - 1951 MAP

SITE SIZE (approx acreage) _____

SITE SIZE (est in sq meters) _____

DEPTH OF CULTURAL DEPOSIT
(if known) _____

ELEVATION

Meters	Feet
Max _____	Max <u>16</u>
Min _____	Min <u>10</u>

SITE DISTURBANCES

- | | |
|--|---|
| <input type="checkbox"/> bioturbation | <input type="checkbox"/> dredging/ditching |
| <input type="checkbox"/> erosion | <input checked="" type="checkbox"/> site looting |
| <input checked="" type="checkbox"/> mining/borrow pit | <input type="checkbox"/> forest preparation or harvesting |
| <input type="checkbox"/> agricultural | <input type="checkbox"/> fill |
| <input checked="" type="checkbox"/> residential/commercial | <input type="checkbox"/> _____ |

- ☐ previous archaeological excavations
- ☐ _____
- ☐ _____
- ☐ _____

DEGREE OF SITE DESTRUCTION

- | | |
|---|--------------------------------|
| <input type="checkbox"/> relatively undisturbed | <input type="checkbox"/> minor |
| <input type="checkbox"/> moderate | <input type="checkbox"/> major |

COLLECTION STRATEGY

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> general | <input type="checkbox"/> selective |
| <input type="checkbox"/> controlled | <input checked="" type="checkbox"/> <u>NONE AT THIS TIME</u> |

TYPE OF INVESTIGATION

- | | |
|---|--|
| <input type="checkbox"/> surface collection | <input type="checkbox"/> auger test |
| <input type="checkbox"/> shovel test | <input type="checkbox"/> coring |
| <input type="checkbox"/> extensive excavation | <input type="checkbox"/> remote sensing |
| <input type="checkbox"/> test excavation | <input checked="" type="checkbox"/> none <u>AT THIS TIME</u> |

- ☐ unknown
- ☒ INTERVIEW - BASE SURVEYOR
- ☐ _____
- ☐ _____

OPTIONAL NARRATIVE DESCRIPTION (If there is no published report, provide a short description of the site on a separate sheet.)

OPTIONAL PHOTOGRAPHS OR SKETCHES OF DIAGNOSTIC OR UNIQUE ARTIFACTS (Please attach separate sheet(s).)

FORM PREPARED BY JANET LLOYD

ADDRESS UWF, DEPT. ANT/SOC, 11000 UNIVERSITY PKY, PENSACOLA, FL 32514

DATE 28 OCT 88

AFFILIATION (FAS chapter, government agency, etc.): UNIVERSITY OF WEST FLORIDA DEPT ANT/SOC, FAS, PENSACOLA ARCHAEOLOGICAL SOCIETY

The map search and informat information indicated the location of the old hospital from the middle to late 19th century in this area on the Naval Air Station. A 1951 map also shows the location of a refuse dump in the area. The area is restricted because of major runway activities. The extent of the site and the degree of site disturbance have not been detemined at this time.

**Appendix C: Comments of Florida State
Historic Preservation Officer**

DIVISIONS OF FLORIDA DEPARTMENT OF STATE

Office of the Secretary
Office of International Relations
Division of Elections
Division of Corporations
Division of Cultural Affairs
Division of Historical Resources
Division of Library and Information Services
Division of Licensing
Division of Administrative Services



FLORIDA DEPARTMENT OF STATE

Katherine Harris

Secretary of State

DIVISION OF HISTORICAL RESOURCES

MEMBER OF THE FLORIDA CABINET

State Board of Education
Trustees of the Internal Improvement Trust Fund
Administration Commission
Florida Land and Water Adjudicatory Commission
Siting Board
Division of Bond Finance
Department of Revenue
Department of Law Enforcement
Department of Highway Safety and Motor Vehicles
Department of Veterans' Affairs

Mr. Hugh A. McClellan
Department of the Army
Mobile District, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628-0001

April 2, 2002

Re: DHR No. 2002-02869 / Date Received by DHR: March 25, 2002
*Phase I Historical Resources Survey: Proposed Expansion of the Fort Barrancas
National Cemetery, Naval Air Station Pensacola, Escambia County, Florida – Draft
Report (Brockington and Associates, Inc. 2002)*

Dear Mr. McClellan:

Our office has received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and 36 *C.F.R., Part 800: Protection of Historic Properties*. The State Historic Preservation Officer is to advise and assist federal agencies when identifying historic properties listed or eligible for listing in the *National Register of Historic Places*, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

One previously recorded archaeological site (8ES1435) and seven isolated finds were identified and recorded as a result of this survey. Archaeological occurrences are categorically ineligible for listing in the *National Register of Historic Places*. Site 8SE1435 is a twentieth-century historic and modern refuse dump that has been heavily impacted by earth-moving activities, and is not considered eligible for listing in the *National Register*. Based on the information provided, this office concurs with this determination. To be considered complete and sufficient according to Chapter 1A-46, *Florida Administrative Code*, the final report must contain the following:

- Procedures to deal with unexpected discoveries
- A completed Florida Master Site File Survey Log with project boundaries depicted on an attached USGS quadrangle map (form available online at <http://dhr.dos.state.fl.us/msf/>)

If you have any questions concerning our comments, please contact Mary Beth Fitts, Historic Sites Specialist, at mbfitts@mail.dos.state.fl.us or (850) 245-6333. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Frederick P. Gaske, Deputy SHPO

Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

Xc: Mr. Thomas G. Whitley, Brockington and Associates, Inc.

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6435

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6436

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

☐ St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office
(813) 272-3843 • FAX: 272-2340